

=&gt; d ibib abs hitstr 126 1-48

L26 ANSWER 1 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:995776 HCAPLUS

TITLE: Compositions and methods for the treatment of parkinson's disease and tardive dyskinesias with quinoline ring-containing neuromelanin-binding compounds

INVENTOR(S): Nelson, Jodi

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 24 pp., Cont.-in-part of U.S. Ser. No. 192,414.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE            |
|------------------------|------|----------|-----------------|-----------------|
| US 2004229908          | A1   | 20041118 | US 2003-616692  | 20030709 <--    |
| US 6417177             | B1   | 20020709 | US 2000-615639  | 20000713 <--    |
| US 2002198231          | A1   | 20021226 | US 2002-192414  | 20020709 <--    |
| PRIORITY APPLN. INFO.: |      |          | US 1999-143767P | P 19990713 <--  |
|                        |      |          | US 2000-175051P | P 20000107 <--  |
|                        |      |          | US 2000-202140P | P 20000505 <--  |
|                        |      |          | US 2000-615639  | A2 20000713 <-- |
|                        |      |          | US 2002-192414  | A2 20020709     |
|                        |      |          | US 2003-479748P | P 20030619      |

AB This invention provides comps. and methods for increasing cellular respiration of melanized catecholamine neurons, and methods for alleviating symptoms or stopping appearance and/or progression of symptoms of Parkinson's disease and related conditions, characterized by nigrostriatal degeneration, as well as drug-induced dyskinesias, tardive dyskinesia, Neuroleptic Malignant Syndrome, and neg. symptoms of schizophrenia. An effective amount of a neuromelanin-binding composition

having

a quinoline ring in a suitable pharmaceutical carrier is administered to patient in need of such treatment. Preferably the composition comprises (-)-chloroquine diphosphate. Selected adjuvants are also provided as part of the comps. of this invention.

IT 116644-53-2, Mibefradil

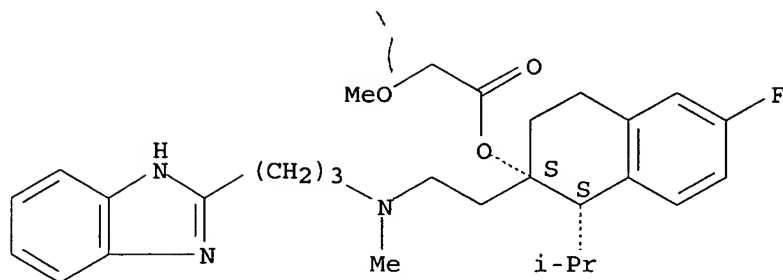
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment of parkinson's disease and tardive dyskinesias using neuromelanin-binding quinoline analogs and adjuvants such as cytochrome P 450 inhibitors and dopamine modulators)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 2 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:473189 HCAPLUS

DOCUMENT NUMBER: 141:35979

TITLE: Ion channel assay methods using repetitive application of electric fields to set transmembrane potential

INVENTOR(S): Maher, Michael P.; Gonzalez, Jesus E.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 95 pp., Cont.-in-part of U.S. Pat. Appl. 2002 45,159.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC., NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE            |
|------------------------|------|----------|-----------------|-----------------|
| US 2004110123          | A1   | 20040610 | US 2003-620312  | 20030714 <--    |
| US 2002045159          | A1   | 20020418 | US 2001-804457  | 20010312 <--    |
| PRIORITY APPLN. INFO.: |      |          | US 2000-217671P | P 20000710 <--  |
|                        |      |          | US 2001-804457  | A2 20010312 <-- |

AB A method of characterizing the biol. activity of a candidate compound may include exposing cells to the candidate compound, and then exposing the cells to a repetitive application of elec. fields so as to set the transmembrane potential to a level corresponding to a pre-selected voltage dependent state of a target ion channel. A 96 well plate assay was developed for antagonists of the L-type calcium channel that incorporates elec. stimulation in the presence of DISBAC2(3) and CC2-DMPE voltage-sensitive FRET probes.

IT 116644-53-2, Mibefradil

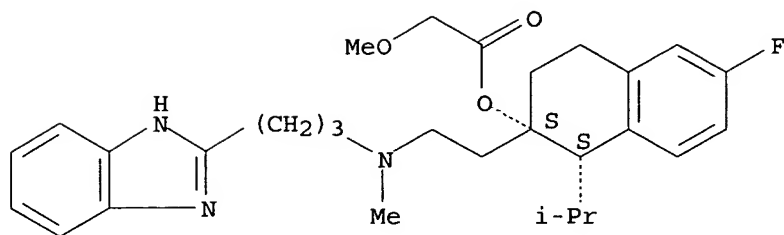
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(ion channel assay methods using repetitive application of elec. fields to set transmembrane potential)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 3 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:451474 HCAPLUS

DOCUMENT NUMBER: 141:1258

TITLE: Nitrosated compounds in methods of treating vascular diseases characterized by nitric oxide insufficiency.

INVENTOR(S): Loscalzo, Joseph; Vita, Joseph A.; Loberg, Michael D.; Worcel, Manuel

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S. Ser. No. 679,257.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE            |
|------------------------|------|----------|-----------------|-----------------|
| US 2004105850          | A1   | 20040603 | US 2003-692724  | 20031027 <--    |
| US 6635273             | B1   | 20031021 | US 2000-697317  | 20001027 <--    |
| US 2004071766          | A1   | 20040415 | US 2003-679257  | 20031007 <--    |
| PRIORITY APPLN. INFO.: |      |          | US 1999-162230P | P 19991029 <--  |
|                        |      |          | US 2000-179020P | P 20000131 <--  |
|                        |      |          | US 2000-697317  | A1 20001027 <-- |
|                        |      |          | US 2003-679257  | A2 20031007     |

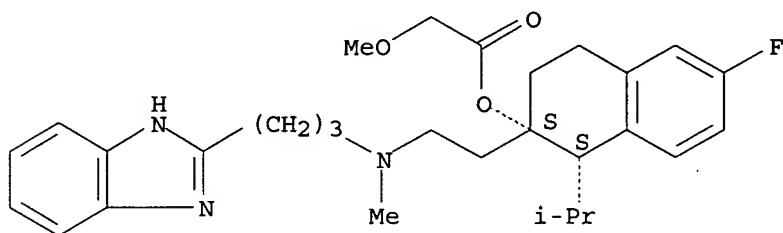
OTHER SOURCE(S): MARPAT 141:1258

AB The invention provides methods of treating and/or preventing vascular diseases characterized by nitric oxide insufficiency by administering a therapeutically effective amount of at least one nitrosated angiotensin-converting enzyme inhibitor, nitrosated beta-adrenergic blocker, nitrosated cholesterol reducer, nitrosated calcium channel blocker, nitrosated endothelin antagonist, nitrosated angiotensin II receptor antagonist, nitrosated renin inhibitor, and optionally at least one compound used to treat cardiovascular diseases and/or at least one antioxidant, or a pharmaceutically acceptable salt thereof, and/or at least one compound that donates, transfers or releases nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor, stimulates endogenous synthesis of nitric oxide or is a substrate for nitric oxide synthase. The antioxidant may preferably be a hydralazine compound or a pharmaceutically acceptable salt thereof. The compound that donates, transfers or releases nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor, stimulates endogenous synthesis of nitric oxide or is a substrate for nitric oxide synthase may preferably be isosorbide dinitrate and/or isosorbide mononitrate. The vascular diseases characterized by nitric oxide insufficiency include a cardiovascular disease and a disease resulting from oxidative stress. Nitric oxide action was shown to be impaired in the microvasculature of black hypertensive patients to a greater extent than in white hypertensive

patients.

IT **116644-53-2D**, Mibefradil, nitrosated compds.  
 RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);  
 THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (nitrosated compds. in methods of treating vascular diseases  
 characterized by nitric oxide insufficiency)  
 RN 116644-53-2 HCAPLUS  
 CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-  
 yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-  
 2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 4 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2004:269863 HCAPLUS  
 DOCUMENT NUMBER: 140:281417  
 TITLE: Combination therapy using antihypertensive agents and  
 endothelin antagonists for vascular conditions  
 associated with a male or female sexual dysfunction  
 INVENTOR(S): Adams, Michael A.; Hale, Taben M.; Heaton, Jeremy P.  
 W.  
 PATENT ASSIGNEE(S): Queen's University At Kingston, Can.; Callegy  
 Pharmaceuticals, Inc.  
 SOURCE: U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U.S.  
 Pat. Appl. 2003 8,020.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE            |
|------------------------|------|----------|-----------------|-----------------|
| US 2004063719          | A1   | 20040401 | US 2003-429197  | 20030502 <--    |
| US 6284763             | B1   | 20010904 | US 1999-382749  | 19990825 <--    |
| US 2002035067          | A1   | 20020321 | US 2001-902787  | 20010712 <--    |
| US 6458797             | B2   | 20021001 |                 |                 |
| US 2003008020          | A1   | 20030109 | US 2002-192281  | 20020709 <--    |
| US 6787553             | B2   | 20040907 |                 |                 |
| US 2004234619          | A1   | 20041125 | US 2004-869755  | 20040615 <--    |
| PRIORITY APPLN. INFO.: |      |          | US 1998-98178P  | P 19980826 <--  |
|                        |      |          | US 1999-382749  | A1 19990825 <-- |
|                        |      |          | US 2001-902787  | A1 20010712 <-- |
|                        |      |          | US 2002-377917P | P 20020502      |
|                        |      |          | US 2002-192281  | A2 20020709     |

AB The present invention provides a method for a more efficacious treatment  
 of a vascular condition through the administration of a therapeutically  
 effective amount of a combination of an anti-pressor agent, an endothelin  
 antagonist, and a sex hormone for repetitive cycles of on/off-treatment.

In one embodiment, the invention provides a method for the prevention of tolerance induced by an anti-pressor agent via the inclusion of an endothelin antagonist in a combination therapy approach to remodel vascular structure and treat vascular conditions associated with a male or female sexual dysfunction, atherosclerosis, renal failure, hypertension, congestive heart failure, diabetic nephropathy, and diabetic neuropathy. The anti-pressor agent comprises one or more compds. such as prostaglandin-E 1, an ACE inhibitor, an angiotensin-II receptor antagonist, an  $\alpha$ 1-adrenergic receptor antagonist, a  $\beta$ -adrenergic receptor antagonist, a calcium channel blocker, an activator of guanylyl cyclase or adenylyl cyclase, a phosphodiesterase inhibitor, and hydralazine. The endothelin antagonist comprises one or more compds. such as a peptidal endothelin antagonist, a non-peptidal endothelin antagonist, and an inhibitor of endothelin converting enzyme. Such a combination therapy approach enhances the efficacy of the anti-pressor agent and enables an increase in the frequency and duration of anti-pressor administrations for the long term treatment of vascular conditions.

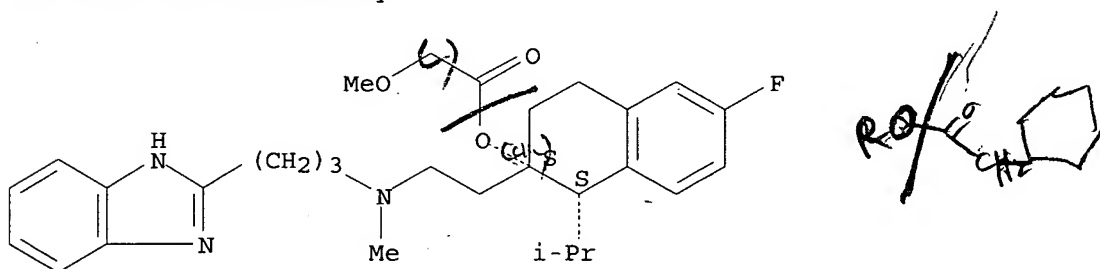
IT 116644-53-2, Mibefradil

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(combination therapy using antihypertensive agents and endothelin antagonists for vascular conditions associated with a male or female sexual dysfunction)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 5 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:41228 HCAPLUS

DOCUMENT NUMBER: 140:105304

TITLE: Compositions and methods for the treatment of Parkinson's disease and tardive dyskinesias

INVENTOR(S): Nelson, Jodi

PATENT ASSIGNEE(S): Alpha Research Group, L.L.C., USA

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| WO 2004004660  | A2   | 20040115 | WO 2003-US21463 | 20030709 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, |      |          |                 |          |

Searched by P. Ruppel

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002198231 A1 20021226 US 2002-192414 20020709 <--  
 PRIORITY APPLN. INFO.: US 2002-192414 A 20020709  
 US 2003-479748P P 20030619  
 US 1999-143767P P 19990713 <--  
 US 2000-175051P P 20000107 <--  
 US 2000-202140P P 20000505 <--  
 US 2000-615639 A2 20000713 <--

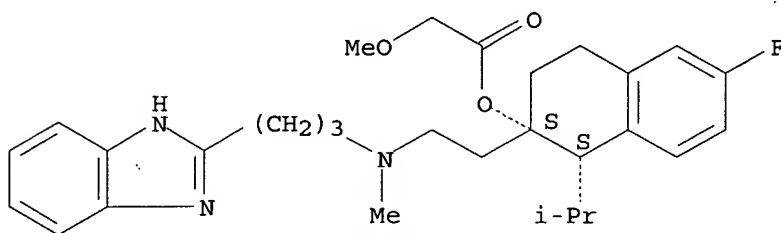
AB This invention provides compns. and methods for increasing cellular respiration of melanized catecholamine neurons, and methods for alleviating symptoms or stopping appearance and/or progression of symptoms of Parkinson's disease and related conditions, characterized by nigrostriatal degeneration, as well as drug-induced dyskinesias, tardive dyskinesia, Neuroleptic Malignant Syndrome, and neg. symptoms of schizophrenia. An effective amount of a neuromelanin-binding composition having a quinoline ring in a suitable pharmaceutical carrier is administered to patient in need of such treatment. Preferably the composition comprises (-)-chloroquine diphosphate. Selected adjuvants are also provided as part of the compns. of this invention.

IT 116644-53-2, Mibefradil  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (compns. for treatment of Parkinson's disease and tardive dyskinesias)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 6 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:678514 HCAPLUS

DOCUMENT NUMBER: 139:191440

TITLE: Methods of treating or preventing a cardiovascular condition using a cyclooxygenase-1 inhibitor

INVENTOR(S): Krul, Elaine S.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 32 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE           |
|------------------------|------|----------|-----------------|----------------|
| US 2003162824          | A1   | 20030828 | US 2002-292255  | 20021112 <--   |
| PRIORITY APPLN. INFO.: |      |          | US 2001-331346P | P 20011112 <-- |
|                        |      |          | US 2001-338291P | P 20011113 <-- |

OTHER SOURCE(S): MARPAT 139:191440

AB Methods for treating or preventing one or more cardiovascular conditions in a subject comprises treating the subject with a therapeutically effective amount of a selective cyclooxygenase-1 inhibitor or a pharmaceutically-acceptable salt, tautomer or prodrug thereof alone or in combination with either a drug used in the treatment or prevention of a cardiovascular condition or a non-drug therapy used in the treatment of a cardiovascular condition. Cyclooxygenase-1 inhibitor, 5-(4-Chlorophenyl)-1-(4-methoxyphenyl)-3-(trifluoromethyl)pyrazole (I), was prepared from 4'-chloroacetophenone and (4-methoxyphenyl)hydrazine hydrochloride. I inhibited development of atherosclerosis in cholesterol-fed apoE knockout mice.

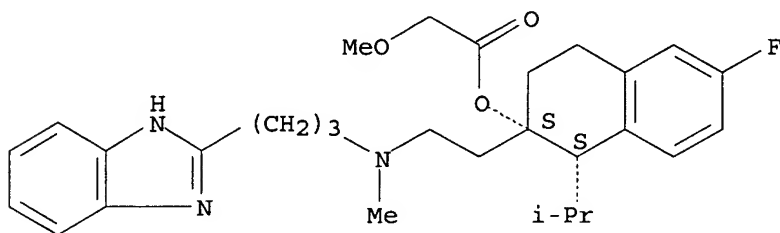
IT 116644-53-2, Mibefradil

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(calcium channel blocker; cyclooxygenase-1 inhibitor for treating or preventing cardiovascular conditions)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 7 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:355819 HCAPLUS

DOCUMENT NUMBER: 138:348731

TITLE: Modulators of small-conductance, calcium-activated potassium (SK) channels and T-type calcium channels, and therapeutic use

INVENTOR(S): Wolfart, Jakob; Roeper, Jochen

PATENT ASSIGNEE(S): Fr.

SOURCE: U.S. Pat. Appl. Publ., 57 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

| PATENT NO. | KIND | DATE  | APPLICATION NO. | DATE  |
|------------|------|-------|-----------------|-------|
| -----      | ---- | ----- | -----           | ----- |

Searched by P. Ruppel

US 2003087799 A1 20030508 US 2002-216128 20020809 <--  
 CA 2397005 AA 20030507 CA 2002-2397005 20020807 <--  
 WO 2003039449 A2 20030515 WO 2002-GB4880 20021030 <--  
 WO 2003039449 A3 20040415

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1465609 A2 20041013 EP 2002-770126 20021030 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRIORITY APPLN. INFO.:

GB 2001-26781 A 20011107 <--

US 2002-216128 A 20020809

WO 2002-GB4880 W 20021030

AB A method of treatment is described. The inventors have found that preferential coupling of small-conductance, calcium-activated potassium (SK) channels to T-type calcium channels prevents bursting in dopaminergic midbrain neurons. The treatment method comprises administering an agent which is capable of causing a dopaminergic neuron to enter bursting mode and/or of preventing it from leaving bursting mode. In a preferred aspect, the agent modulates a T-type channel and/or an SK (preferably SK3) channel and/or the coupling of a T-type channel with an SK (preferably SK3) channel. The invention is useful in the treatment of e.g. Parkinson's disease.

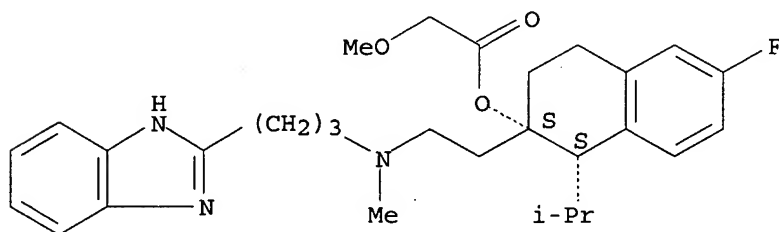
IT 116644-53-2, Mibefradil

RL: PAC (Pharmacological activity); BIOL (Biological study)  
 (modulators of small-conductance, calcium-activated potassium (SK) channels and T-type calcium channels, and therapeutic use)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 8 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:355625 HCAPLUS

DOCUMENT NUMBER: 138:331719

TITLE: Method for the suppression of visceral pain by regulating T type calcium channel

INVENTOR(S): Shin, Hee-Sup; Kim, Dae-Soo; Kim, Chan-Ki

PATENT ASSIGNEE(S): S. Korea

SOURCE: U.S. Pat. Appl. Publ., 9 pp.

Searched by P. Ruppel



DOCUMENT TYPE: **Patent**  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

CODEN: USXXCO

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE         |
|---------------|------|----------|-----------------|--------------|
| US 2003086980 | A1   | 20030508 | US 2002-284889  | 20021031 <-- |
| KR 2003037081 | A    | 20030512 | KR 2001-68180   | 20011102 <-- |
| JP 2003137813 | A2   | 20030514 | JP 2002-310392  | 20021025 <-- |
| EP 1312362    | A1   | 20030521 | EP 2002-257625  | 20021104 <-- |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRIORITY APPLN. INFO.: KR 2001-68180 A 20011102 <--

AB The disclosure concerns a method for the suppression of visceral pain by regulating the T-type calcium channel; a visceral pain inhibitor that includes a T-type calcium channel inhibitor as an effective ingredient; and a method of screening a visceral pain inhibitor by investigating the suppression activity of T-type calcium channels. Particularly, the present invention relates to a method for the suppression of visceral pain by regulating an alpha 1G T-type calcium channel in the central nervous system and alpha 1H and alpha 1I T-type calcium channels in the peripheral nervous system; a visceral pain inhibitor that includes a T-type calcium channel inhibitor as an effective ingredient; and a method of screening a visceral pain inhibitor by investigating the suppression activity of T-type calcium channels. The method of the present invention can be effectively used to suppress visceral pain by regulating T-type calcium channel in a precise mechanism without any side effects. Mibefradil induced analgesia to the visceral pain caused by acetic acid in mice.

IT 116644-53-2, Mibefradil

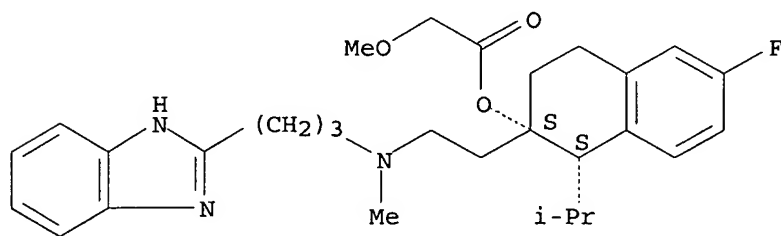
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(as T-type calcium channel inhibitor; suppression of visceral pain by regulating T type calcium channel)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 9 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:335151 HCAPLUS

DOCUMENT NUMBER: 138:348729

TITLE: Method for resistance of epilepsy by suppressing the function of alpha 1G protein

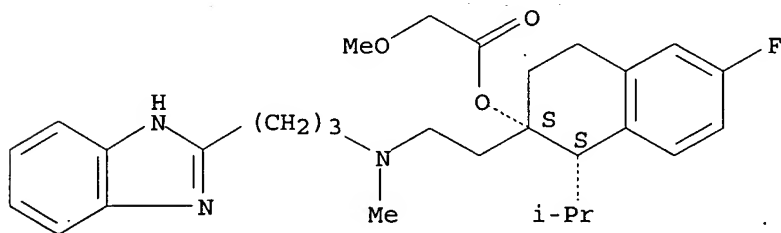
INVENTOR(S): Shin, Hee-Sup; Kim, Daesoo; Keum, Sehoon; Song, Inseon

PATENT ASSIGNEE(S): Bio Genomics, Inc., S. Korea; Pohang University of

SOURCE: Science and Technology  
PCT Int. Appl., 53 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE           |
|---|------|----------|-----------------|----------------|
| WO 2003035698   | A1   | 20030501 | WO 2002-KR87    | 20020118 <--   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW   |      |          |                 |                |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |                |
| KR 2003034605   | A    | 20030509 | KR 2001-66257   | 20011026 <--   |
| PRIORITY APPLN. INFO.:  |      |          | KR 2001-66257   | A 20011026 <-- |
| AB The disclosure concerns a method for resistance of epilepsy by suppressing the function of alpha 1G protein of T-type calcium channels, use of suppressor of alpha 1G protein for prevention or treatment for epilepsy, knockout mice resisting epilepsy by disrupting alpha 1G subunit of T-type calcium channel, and preparation method thereof. In addition, suppressing alpha 1G protein of T-type calcium channels does not occur epilepsy, and alpha 1G-deficient mice are useful to study of mechanism related to epilepsy. |      |          |                 |                |
| IT 116644-53-2, Mibefradil  |      |          |                 |                |
| RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)   |      |          |                 |                |
| (method for resistance of epilepsy by suppressing the function of alpha 1G protein)   |      |          |                 |                |
| RN 116644-53-2 HCAPLUS  |      |          |                 |                |
| CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)   |      |          |                 |                |

Absolute stereochemistry.

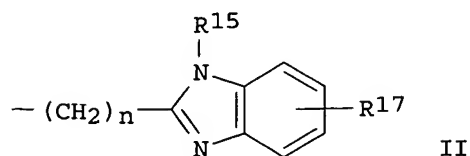
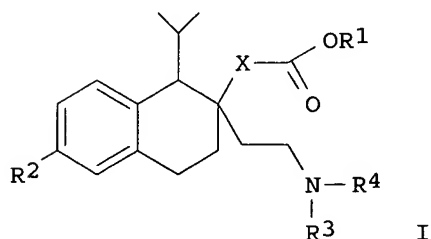


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 10 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:301058 HCAPLUS  
DOCUMENT NUMBER: 138:297661  
TITLE: Mibefradil-based compounds as calcium channel blockers

INVENTOR(S): useful in the treatment of hypertension and angina  
 Druzgala, Pascal; Milner, Peter G.; Pfister, Jurg R.;  
 Zhang, Xiaoming  
 PATENT ASSIGNEE(S): Aryx Therapeutics, USA  
 SOURCE: PCT Int. Appl., 50 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE           |
|---|------|----------|-----------------|----------------|
| WO 2003031415   | A1   | 20030417 | WO 2002-US32562 | 20021010 <--   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,<br>GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,<br>LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,<br>PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,<br>UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW<br>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,<br>KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,<br>FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,<br>CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG |      |          |                 |                |
| US 2003130330   | A1   | 20030710 | US 2002-269139  | 20021010 <--   |
| US 6608097  | B2   | 20030819 |                 |                |
| EP 1438297  | A1   | 20040721 | EP 2002-773743  | 20021010 <--   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK  |      |          |                 |                |
| US 2004034237   | A1   | 20040219 | US 2003-643699  | 20030818 <--   |
| PRIORITY APPLN. INFO.:  |      |          |                 |                |
|   |      |          | US 2001-328588P | P 20011010 <-- |
|   |      |          | US 2002-269139  | A1 20021010    |
|   |      |          | WO 2002-US32562 | W 20021010     |
| OTHER SOURCE(S): MARPAT 138:297661  |      |          |                 |                |
| GI  |      |          |                 |                |



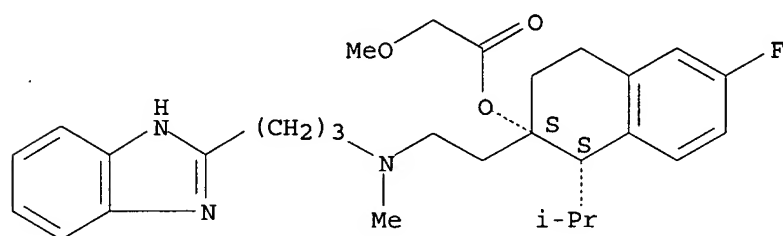
AB The invention provides mibefradil-based calcium channel blockers I [X = bond, (CH<sub>2</sub>)<sub>n</sub>, O, S, O(CH<sub>2</sub>)<sub>n</sub> (n = 1-6); R<sub>1</sub> = C1-6 alkyl, optionally substituted with OH or NH<sub>2</sub>; R<sub>2</sub> = F, COOR<sub>5</sub> (R<sub>5</sub> = R<sub>1</sub>); R<sub>3</sub> = CH<sub>3</sub>, (CH<sub>2</sub>)<sub>n</sub>COOR<sub>6</sub>, (n = 1-6; R<sub>6</sub> = R<sub>1</sub>); R<sub>4</sub> = (CH<sub>2</sub>)<sub>n</sub>COR<sub>7</sub>R<sub>8</sub>, (CH<sub>2</sub>)<sub>n</sub>R<sub>10</sub>R<sub>11</sub>, Q<sub>1</sub>; R<sub>7</sub> = O, NH, NR<sub>9</sub>, R<sub>8</sub> = optionally substituted aryl or heterocyclyl; R<sub>9</sub> = C1-6 alkyl; R<sub>10</sub> = O, S, SO, SO<sub>2</sub>, NH, NR<sub>12</sub>, N(CH<sub>2</sub>)<sub>m</sub>COOR<sub>13</sub>; R<sub>11</sub> = aryl or heterocyclyl optionally substituted with (CH<sub>2</sub>)<sub>n</sub>COOR<sub>14</sub>, R<sub>12</sub>-R<sub>14</sub> = R<sub>1</sub>; R<sub>15</sub> = (CH<sub>2</sub>)<sub>n</sub> COOR<sub>16</sub>, R<sub>16</sub> = R<sub>1</sub>; R<sub>17</sub> = absent or COOR<sub>18</sub>; R<sub>18</sub> = R<sub>1</sub>; n = 1-6] useful in the treatment of hypertension, angina pectoris, ischemia, arrhythmias and cardiac insufficiency.

IT **116644-53-2D**, Mibefradil, derivs.  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (mibefradil-based compds. as calcium channel blockers for treatment of hypertension and angina)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 11 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:300530 HCAPLUS

DOCUMENT NUMBER: 138:314620

TITLE: Calcium channel multibinding drugs, and uses

INVENTOR(S): Ji, Yu-Hua; Natarajan, Maya; Griffin, John H.; Jenkins, Thomas E.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 183 pp., Cont.-in-part of U.S. Ser. No. 325,557, abandoned.  
 CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 31

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE         |
|---------------|------|----------|-----------------|--------------|
| US 2003073127 | A1   | 20030417 | US 1999-456429  | 19991208 <-- |
| CA 2318806    | AA   | 19991216 | CA 1999-2318806 | 19990607 <-- |
| CA 2319142    | AA   | 19991216 | CA 1999-2319142 | 19990607 <-- |
| CA 2319153    | AA   | 19991216 | CA 1999-2319153 | 19990607 <-- |
| WO 9963984    | A1   | 19991216 | WO 1999-US11801 | 19990607 <-- |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

Searched by P. Ruppel

JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
 TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
 MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 WO 9963932 A2 19991216 WO 1999-US12724 19990607 <--  
 WO 9963932 A3 20000203  
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
 JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
 TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
 MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 WO 9964045 A1 19991216 WO 1999-US12754 19990607 <--  
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
 JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
 TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
 MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 AU 9945511 A1 19991230 AU 1999-45511 19990607 <--  
 AU 9946726 A 19991230 AU 1999-46726 19990607 <--  
 EP 1085879 A2 20010328 EP 1999-928442 19990607 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI  
 EP 1085890 A1 20010328 EP 1999-930122 19990607 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI  
 EP 1089749 A1 20010411 EP 1999-928447 19990607 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI  
 JP 2002517437 T2 20020618 JP 2000-553053 19990607 <--  
 ZA 2000004562 A 20011130 ZA 2000-4562 20000831 <--  
 ZA 2000004563 A 20011130 ZA 2000-4563 20000831 <--  
 ZA 2000004564 A 20011130 ZA 2000-4564 20000831 <--  
 US 2003044845 A1 20030306 US 2002-75017 20020213 <--  
 US 2004242561 A1 20041202 US 2004-877368 20040625 <--  
 PRIORITY APPLN. INFO.: US 1998-88465P P 19980608 <--  
 US 1998-93068P P 19980716 <--  
 US 1998-103866P P 19981012 <--  
 US 1999-325557 B2 19990604 <--  
 US 1999-327096 B1 19990607 <--  
 WO 1999-US11801 W 19990607 <--  
 WO 1999-US12724 W 19990607 <--  
 WO 1999-US12754 W 19990607 <--  
 US 1999-456429 A1 19991208 <--  
 US 2000-499176 B1 20000207 <--

OTHER SOURCE(S): MARPAT 138:314620

AB Multibinding compds. are disclosed. The compds. of the invention comprise 2-10 ligands covalently connected via linker groups, each of the ligands being capable of binding to a ligand-binding site in a calcium channel, thereby modulating the biol. activities thereof. The compds. of the

invention may be used to treat diseases or conditions resulting from calcium channel activity. Pharmaceutical compns. are also disclosed.

IT 116644-53-2D, Mibefradil, ligand-linker conjugates

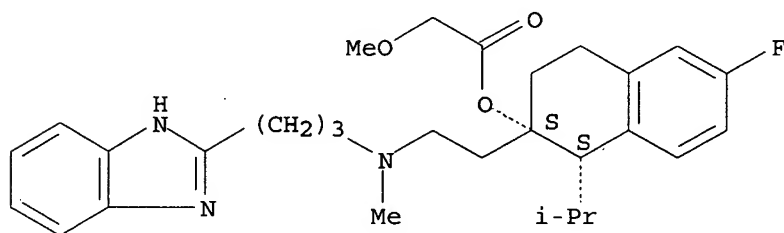
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(calcium channel multibinding drugs, and uses)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 12 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:300513 HCAPLUS

DOCUMENT NUMBER: 138:297607

TITLE: Computational technique-based drug rescue by redesign of ADMET/PK properties

INVENTOR(S): Selick, Harold E.; Korzekwa, Kenneth R.; Mackarehtschian, Katrin

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 40 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|---|------|----------|-----------------|--------------|
| US 2003073069   | A1   | 20030417 | US 2001-978671  | 20011015 <-- |
| WO 2003034065   | A2   | 20030424 | WO 2002-US32873 | 20021015 <-- |
| WO 2003034065   | A3   | 20040624 |                 |              |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |              |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |              |

PRIORITY APPLN. INFO.: US 2001-978671 A 20011015 <--

AB Otherwise efficacious drugs having an ADMET/PK (absorption, distribution, metabolism, elimination, toxicity, i.e., pharmacokinetic) problem are redesigned or "rescued" by applying computational techniques that identify related chemical structures that preserve the initial drug's effectiveness but improve its ADMET/PK properties. The otherwise efficacious drug may

be subjected to a suite of computational tools that identify sites responsible for problematic ADMET/PK properties and/or identify related compds. that have improved ADMET/PK properties.

IT 116644-53-2, Mibefradil

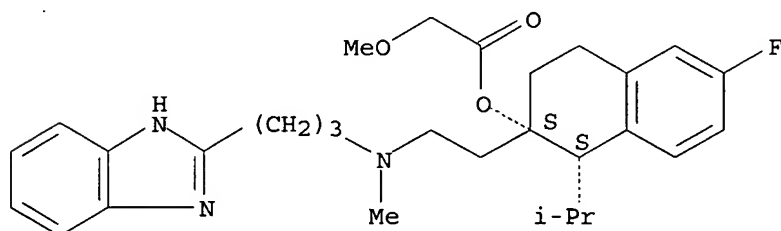
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(computational technique-based drug rescue by redesign of ADMET/PK properties)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 13 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:222330 HCAPLUS

DOCUMENT NUMBER: 138:215346

TITLE: Method for treating a demyelinating condition

INVENTOR(S): Werner, Peter; Pitt, David; Brand-Schieber, Elimor

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. 6,455,553.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

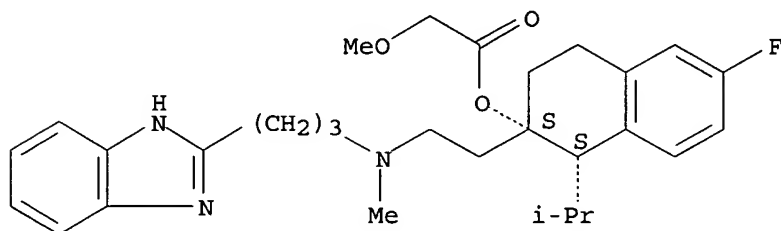
| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE            |
|------------------------|------|----------|-----------------|-----------------|
| US 2003055036          | A1   | 20030320 | US 2002-223068  | 20020816 <--    |
| US 6455553             | B1   | 20020924 | US 2000-678686  | 20001003 <--    |
| PRIORITY APPLN. INFO.: |      |          | US 2000-678686  | A2 20001003 <-- |

AB Methods for treating a demyelinating condition in a subject in need of treatment are provided. In some aspects the methods encompass administering to the subject an amount of a Ca<sup>2+</sup> channel blocker effective to treat the demyelinating condition. In other aspects, the methods encompass administering to the subject an amount of a glutamate inhibitor effective to treat the demyelinating condition. In addnl. aspects, the methods encompass administering to the subject a Ca<sup>2+</sup> channel blocker in combination with a glutamate inhibitor, in amts. effective to treat the demyelinating condition. In still other aspects, the methods encompass administering to the subject a Ca<sup>2+</sup> channel blocker in combination with a hypertensive agent, in amts. effective to treat the demyelinating condition. Also provided are pharmaceutical compns. having a Ca<sup>2+</sup> channel blocker, a glutamate inhibitor, and a pharmaceutically-acceptable carrier. Addnl., pharmaceutical compns. having a Ca<sup>2+</sup> channel blocker, a hypertensive agent, and a pharmaceutically-acceptable carrier are

provided.

IT 116644-53-2, Mibefradil  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (method for treating a demyelinating condition)  
 RN 116644-53-2 HCAPLUS  
 CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 14 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:133047 HCAPLUS

DOCUMENT NUMBER: 138:163518

TITLE: Improved treatment of cancer with irinotecan based on genotyping of human gene CYP3A5 encoding cytochrome P 450 3A5

INVENTOR(S): Heinrich, Guenther; Kerb, Reinhold

PATENT ASSIGNEE(S): Epidaurus Biotechnologie AG, Germany

SOURCE: PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO.             | KIND   | DATE     | APPLICATION NO. | DATE           |
|------------------------|--|----------|-----------------|----------------|
| WO 2003013534          | A2   | 20030220 | WO 2002-EP8219  | 20020723 <--   |
| WO 2003013534          | A3   | 20031009 |                 |                |
| WO 2003013534          | C2   | 20040429 |                 |                |
| W:                     | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW |          |                 |                |
| RW:                    | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |                |
| EP 1408975             | A2   | 20040421 | EP 2002-767255  | 20020723 <--   |
| R:                     | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK   |          |                 |                |
| PRIORITY APPLN. INFO.: |  |          | EP 2001-117608  | A 20010723 <-- |
|                        |  |          | EP 2002-11710   | A 20020524     |
|                        |  |          | WO 2002-EP8219  | W 20020723     |

AB The present invention relates to the use of irinotecan or a derivative thereof



for the preparation of a pharmaceutical composition for treating colorectal cancer,

cervical cancer, gastric cancer, lung cancer, malignant glioma, ovarian cancer, and pancreatic cancer in a patient having a genotype with variant alleles of genes involved in irinotecan metabolism, and in particular gene CYP3A5 encoding cytochrome P 450 3A5. Irinotecan (CPT-11) is an analog of the cytotoxic alkaloid camptothecin and is a prodrug of the lipophilic metabolite SN-38 (7-ethyl-10-hydroxycamptothecin). Preferably, a nucleotide deletion, addition and/or substitution comprised by said polynucleotide results in an altered expression of the variant allele compared to the corresponding wild-type allele or an altered activity of the polypeptide encoded by the variant allele compared to the polypeptide encoded by the corresponding wild-type allele. Irinotecan dosage is calculated based on genotype correlated with the risk of toxic reaction.

IT 116644-53-2, Mibefradil

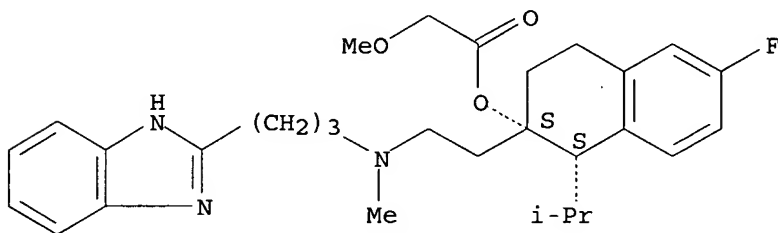
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(CYP3A5 inhibitor; improved treatment of cancer with irinotecan based on genotyping of human gene CYP3A5 encoding cytochrome P 450 3A5)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 15 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:76615 HCAPLUS

DOCUMENT NUMBER: 138:117667

TITLE: Methods and compositions for modulating T-type calcium channels

INVENTOR(S): Romano, Carmelo; Todorovic, Slobodan M.; Zorumski, Charles F.

PATENT ASSIGNEE(S): Washington University, USA

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE         |
|--|------|----------|-----------------|--------------|
| WO 2003007953  | A1   | 20030130 | WO 2002-US22890 | 20020718 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, |      |          |                 |              |

Searched by P. Ruppel

TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
NE, SN, TD, TG

## PRIORITY APPLN. INFO.:

US 2001-306298P

P 20010718 &lt;--

AB The invention discloses methods and compns. for the modulation of activity of T-type calcium 2+ channels. Described is a method for treatment, inhibition or prevention of pain perception in a subject in need thereof comprising administering to the subject an amount of an inhibitor of T-type Ca2+ channel activity or a pharmaceutically acceptable salt or prodrug thereof effective to treat, inhibit or prevent pain perception in the subject.

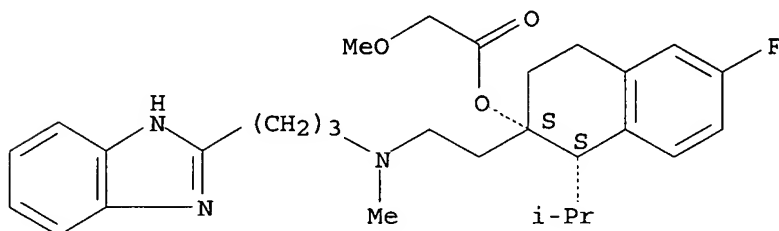
IT 116644-53-2, Mibefradil

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(methods and compns. for modulating T-type calcium channels)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 16 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:978470 HCAPLUS

DOCUMENT NUMBER: 138:33365

TITLE: Compositions and methods for the treatment of  
Parkinson's disease with quinoline ring-containing  
neuromelanin-binding compounds

INVENTOR(S): Nelson, Jodi

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S.  
6,417,177.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE         |
|---------------|------|----------|-----------------|--------------|
| US 2002198231 | A1   | 20021226 | US 2002-192414  | 20020709 <-- |
| US 6417177    | B1   | 20020709 | US 2000-615639  | 20000713 <-- |
| WO 2004004660 | A2   | 20040115 | WO 2003-US21463 | 20030709     |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

Searched by P. Ruppel

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004229908 A1 20041118 US 2003-616692 20030709 <--  
 PRIORITY APPLN. INFO.: US 1999-143767P P 19990713 <--  
 US 2000-175051P P 20000107 <--  
 US 2000-202140P P 20000505 <--  
 US 2000-615639 A2 20000713 <--  
 US 2002-192414 A 20020709  
 US 2003-479748P P 20030619

AB This invention provides compns. and methods for increasing cellular respiration of melanized catecholamine neurons, and methods for alleviating symptoms or stopping appearance and/or progression of symptoms of Parkinson's disease and related conditions, characterized by nigrostriatal degeneration. An effective amount of a neuromelanin-binding composition having a quinoline ring in a suitable pharmaceutical carrier is administered to patient in need of such treatment. Preferably the composition comprises (-)-chloroquine. Selected adjuvants are also provided as part of the compns. of this invention.

IT 116644-53-2, Mibefradil

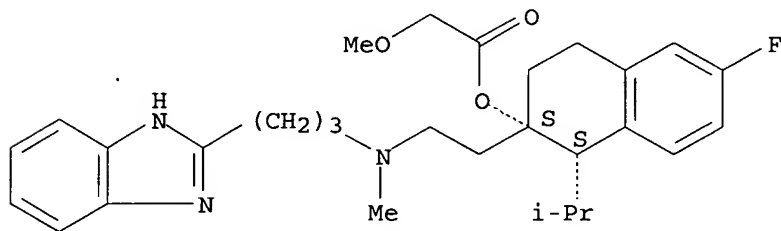
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cytochrome P 450 2D6 inhibitor inhibiting peripheral metabolism of chloroquine compds.; quinoline ring-containing neuromelanin-binding compds. for treatment of Parkinson's disease)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 17 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:778718 HCAPLUS

DOCUMENT NUMBER: 137:289046

TITLE: Methods and compositions for enhancing pharmaceutical treatments

INVENTOR(S): Newman, Michael J.; Dixon, William Ross

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U.S. Ser. No. 684,293.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE            |
|------------------------|------|----------|-----------------|-----------------|
| US 2002147197          | A1   | 20021010 | US 2002-104549  | 20020320 <--    |
| PRIORITY APPLN. INFO.: |      |          | US 1999-158322P | P 19991008 <--  |
|                        |      |          | US 2000-684293  | A2 20001006 <-- |

OTHER SOURCE(S): MARPAT 137:289046

AB Improved methods are provided for therapeutic and/or preventative treatment to a mammal in which the mammal is protected against the toxicity of active pharmaceutical agents that (i) bind to or are substrates for P-gp, (ii) are taxane analogs, and/or (iii) are inhibitors of tubulin disassembly. Addnl. provided are compns. and methods useful for treating cell proliferative disorders. Further provided are methods of increasing the bioavailability of therapeutic and/or preventative treatments in a mammal. Particular embodiments are directed to increasing such bioavailability across the blood-brain barrier.

IT 116644-53-2, Mibefradil 116644-53-2D, Mibefradil, derivs., analogs, and metabolites

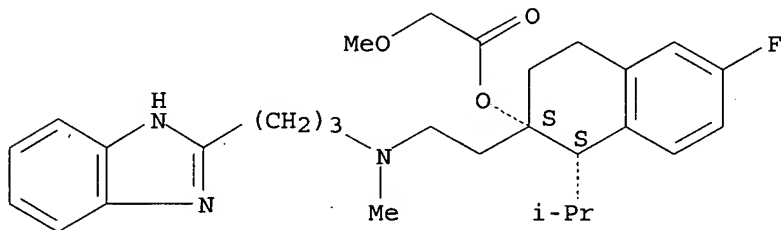
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods and compns. for enhancing pharmaceutical treatments)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

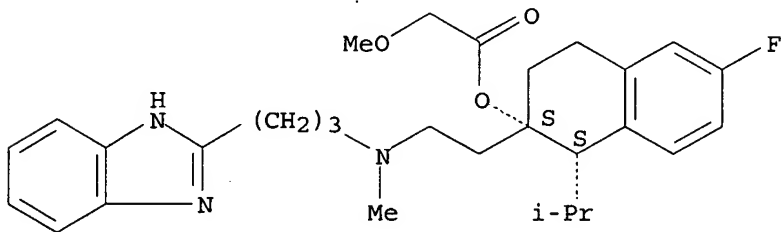
Absolute stereochemistry.



RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 18 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:574927 HCAPLUS

Searched by P. Ruppel

DOCUMENT NUMBER: 137:119655  
 TITLE: Combinations of drugs (e.g., a benzimidazole and pentamidine) for the treatment of neoplastic disorders  
 INVENTOR(S): Borisy, Alexis; Keith, Curtis; Foley, Michael A.; Stockwell, Brent R.  
 PATENT ASSIGNEE(S): Combinatorx, Incorporated, USA  
 SOURCE: PCT Int. Appl., 57 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|---|------|----------|-----------------|--------------|
| WO 2002058697   | A1   | 20020801 | WO 2002-US1707  | 20020122 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |              |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |              |
| US 2002165261   | A1   | 20021107 | US 2001-768870  | 20010124 <-- |
| US 6693125  | B2   | 20040217 |                 |              |
| EP 1363625  | A1   | 20031126 | EP 2002-709117  | 20020122 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR   |      |          |                 |              |
| US 2004063769   | A1   | 20040401 | US 2003-677664  | 20031002 <-- |
| PRIORITY APPLN. INFO.: US 2001-768870 A1 20010124 <--   |      |          |                 |              |
| WO 2002-US1707 W 20020122   |      |          |                 |              |

OTHER SOURCE(S): MARPAT 137:119655

AB The invention features a method for treating a patient having a cancer or other neoplasm, by administering to the patient (i) a benzimidazole or a metabolite or analog thereof; and (ii) pentamidine or a metabolite or analog thereof simultaneously or within 14 days of each other in amts. sufficient to inhibit the growth of the neoplasm.

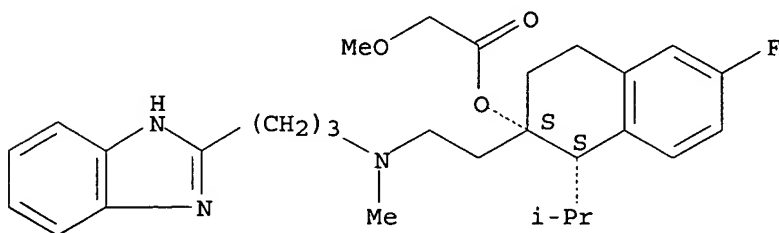
IT 116644-53-2, Mibefradil

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (drug combinations for treatment of neoplastic disorders)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



Searched by P. Ruppel

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 19 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2001:916407 HCAPLUS  
 DOCUMENT NUMBER: 136:53755  
 TITLE: Synthesis of nitrosated and nitrosylated  
 (hetero)cyclic phosphodiesterase inhibitors used in  
 treatment of sexual dysfunction  
 INVENTOR(S): Garvey, David S.; Saenz de Tejada, Inigo; Earl,  
 Richard A.; Khanapure, Subhash P.  
 PATENT ASSIGNEE(S): Nitromed, Inc., USA  
 SOURCE: U.S., 117 pp., Cont.-in-part of U.S. 5,958,926.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE            |
|--|------|----------|-----------------|-----------------|
| US 6331543   | B1   | 20011218 | US 1999-387727  | 19990901 <--    |
| US 5874437   | A    | 19990223 | US 1996-740764  | 19961101 <--    |
| WO 9819672   | A1   | 19980514 | WO 1997-US19870 | 19971031 <--    |
| W: AU, CA, JP, US  |      |          |                 |                 |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE |      |          |                 |                 |
| US 5958926   | A    | 19990928 | US 1998-145142  | 19980901 <--    |
| US 2002019405  | A1   | 20020214 | US 2001-941691  | 20010830 <--    |
| US 6462044   | B2   | 20021008 |                 |                 |
| US 2003023087  | A1   | 20030130 | US 2002-216886  | 20020813 <--    |
| US 2004087591  | A1   | 20040506 | US 2003-694183  | 20031028 <--    |
| PRIORITY APPLN. INFO.:   |      |          |                 |                 |
|  |      |          | US 1996-740764  | A2 19961101 <-- |
|  |      |          | WO 1997-US19870 | A2 19971031 <-- |
|  |      |          | US 1998-145142  | A2 19980901 <-- |
|  |      |          | US 1999-387727  | A1 19990901 <-- |
|  |      |          | US 2001-941691  | A3 20010830 <-- |
|  |      |          | US 2002-216866  | A3 20020813     |
| OTHER SOURCE(S): MARPAT 136:53755                                      |      |          |                 |                 |
| GI   |      |          |                 |                 |

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Compds. I-V, derivs. thereof, and certain substituted Ph and phthalzaine derivs. were claimed [D2 = H, alkyl, D; D = NO, NO2, alkyl, acyl, phosphoryl, silyl, etc.; A1-3 comprise the other subunits of a 5- or 6-membered monocyclic aromatic ring; R8 = H, (halo)alkyl; p = 1-10; R24 = H, cyclohexyl, piperidinyl, etc., with the proviso that at least one of A1-3, J, or R24 contains T-Q or D; T = bond, O, S(O), amino; Q = NO, NO2; D1 = D or H; R37 = (hetero)aryl; R38 = H, halo, alkyl; G1 = alkyl, alkenyl or is part of a ring fused to the piperidine moiety of III; G4 = O, S; R40 = H, alkyl, haloalkyl, halo, etc.; R41 = alkyl, hydroxyalkyl, alkylcarboxy, etc.; R42 = aryl, alkylaryl, alkylalkoxyaryl; T1 = alkyl, oxyalkyl, thioalkyl, aminoalkyl]. Two synthetic examples were provided. E.g., the S-nitroso derivative of the 3-mercapto-3-methylbutyric acid ester of dipyridamole (VI) was prepared in 4 steps from dipyridamole in 3.5% overall yield. VI at doses of 10 and 30 µM was more efficacious in relaxing

phenylephrine-induced tissue contraction than was the known phosphodiesterase inhibitor, dipyridamole. The present invention describes novel (nitrosated/nitrosylated) phosphodiesterase inhibitors, and compns. containing at least one (nitrosated/nitrosylated) phosphodiesterase inhibitor, and, optionally, one or more compds. that donate, transfer or release NO, elevate endogenous levels of endothelium-derived relaxing factor, stimulate endogenous synthesis of NO, or is a substrate for nitric oxide synthase and/or one or more vasoactive agents. The present invention also provides methods for treating or preventing sexual dysfunctions in males and females, for enhancing sexual responses in males and females, and for treating or preventing diseases induced by the increased metabolism of cGMP, such as hypertension, pulmonary hypertension, etc.

IT 116666-63-8D, Posicor, nitroso derivs.

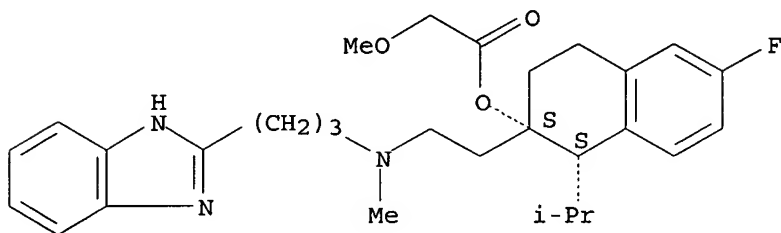
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthesis of nitrosated and nitrosylated (hetero)cyclic phosphodiesterase inhibitors used in treatment of sexual dysfunction)

RN 116666-63-8 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 2 HCl

REFERENCE COUNT: 86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 20 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2001:833855 HCAPLUS  
 DOCUMENT NUMBER: 135:352760  
 TITLE: Inhibition of taxane metabolism  
 INVENTOR(S): Synold, Timothy W.; Doroshov, James H.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE           |
|------------------------|------|----------|-----------------|----------------|
| US 2001041706          | A1   | 20011115 | US 2001-814072  | 20010322 <--   |
| PRIORITY APPLN. INFO.: |      |          | US 2000-191828P | P 20000324 <-- |

Searched by P. Ruppel

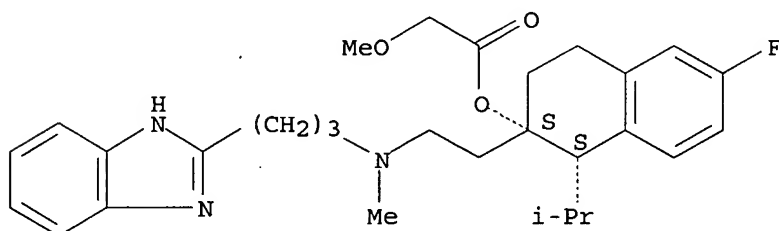
AB Methods are disclosed for the inhibition of taxane metabolism in patients receiving anticancer taxane treatment, in which an effective amount of a CYP3A4 inhibitor and a CYP2C8 inhibitor are administered to the patient.

IT **116644-53-2**, Mibefradil  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (inhibition of taxane metabolism)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 21 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:636058 HCAPLUS

DOCUMENT NUMBER: 135:211039

TITLE: Preparation of tetrahydronaphthalene derivatives for use in therapy of type 1 and type 2 diabetes

INVENTOR(S): Li, Ming; Hansen, John Bondo; Tagmose, Tina Moller

PATENT ASSIGNEE(S): South Alabama Medical Science Foundation, USA; Novo Nordisk A/S

SOURCE: PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

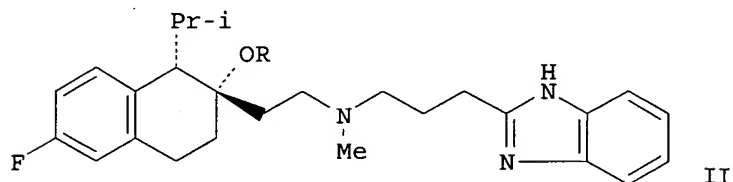
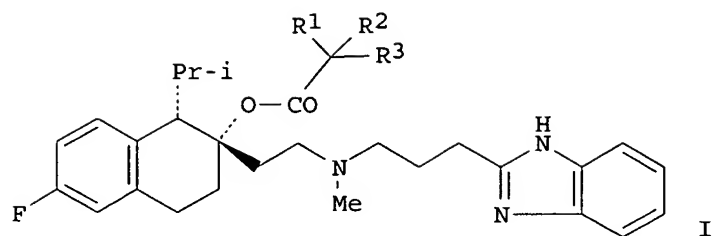
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

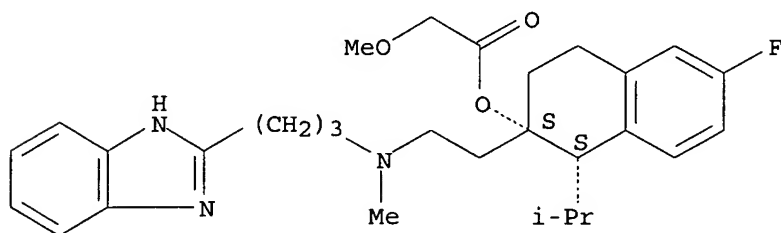
| PATENT NO.  | KIND | DATE     | APPLICATION NO.   | DATE            |
|---|------|----------|-------------------|-----------------|
| <b>WO 2001062741</b>  | A1   | 20010830 | WO 2001-DK129     | 20010223 <--    |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                   |                 |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |      |          |                   |                 |
| US 2001041730   | A1   | 20011115 | US 2001-818392    | 20010327 <--    |
| <b>US 6410743</b>   | B2   | 20020625 |                   |                 |
| PRIORITY APPLN. INFO.:  |      |          | DK 2000-294       | A 20000225 <--  |
|   |      |          | US 2000-185294P   | P 20000228 <--  |
|   |      |          | WO 2001-DK129     | A1 20010223 <-- |
| OTHER SOURCE(S):  |      |          | MARPAT 135:211039 |                 |
| GI  |      |          |                   |                 |





- AB Tetrahydronaphthalene derivs., I (R1 = H, C1-6 alkyl or Ph which is optionally substituted with halogen, OMe, C1-6-alkyl; R2-C-R3 together form a C3-6-cycloalkyl group or a pharmaceutically acceptable salt) were prepared for use in the treatment and/or prevention of type 1 and type 2 diabetes as well as microvascular or macrovascular diseases associated with diabetes. Thus II (R = COC3H5) was prepared in 82% yield and its diHCl in 54% starting from mibefradil diHCl in ethanol and aqueous NaOH via the intermediate II (R = H) which was further reacted with diisopropylethylamine and cyclopropanecarbonyl chloride to yield the free base.
- IT 116666-63-8, Mibefradil dihydrochloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of tetrahydronaphthalene derivs. for use in therapy of type 1 and type 2 diabetes)
- RN 116666-63-8 HCAPLUS
- CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 2 HCl

Searched by P. Ruppel

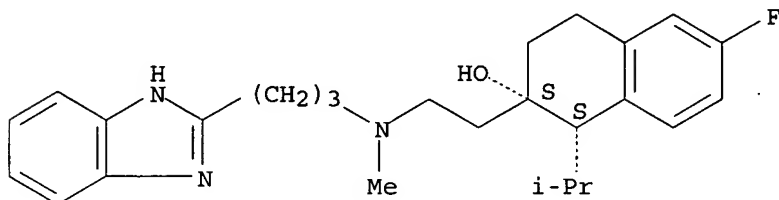
IT 116666-60-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of tetrahydronaphthalene derivs. for use in therapy of type 1 and type 2 diabetes)

RN 116666-60-5 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



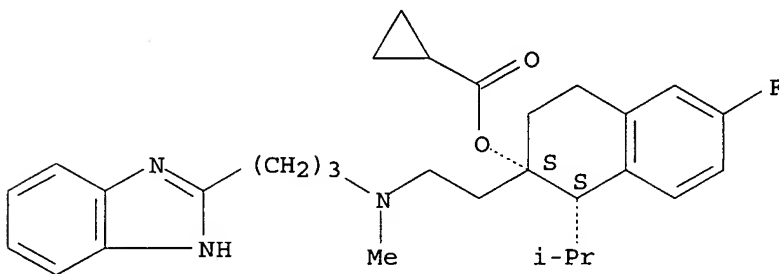
IT 357400-14-7P

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of tetrahydronaphthalene derivs. for use in therapy of type 1 and type 2 diabetes)

RN 357400-14-7 HCAPLUS

CN Cyclopropanecarboxylic acid, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 357400-13-6P 357400-15-8P 357400-16-9P

357400-17-0P 357400-18-1P 357400-19-2P

357400-21-6P 357400-22-7P 357400-24-9P

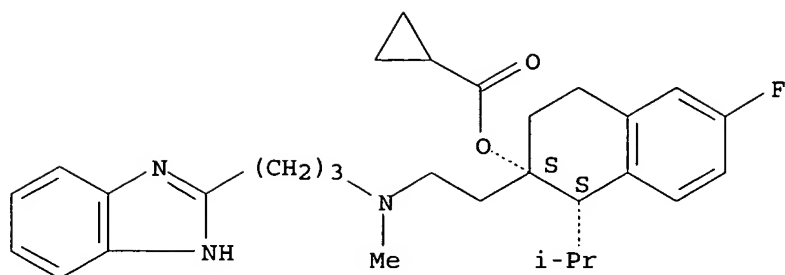
357400-25-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of tetrahydronaphthalene derivs. for use in therapy of type 1 and type 2 diabetes)

RN 357400-13-6 HCAPLUS

CN Cyclopropanecarboxylic acid, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

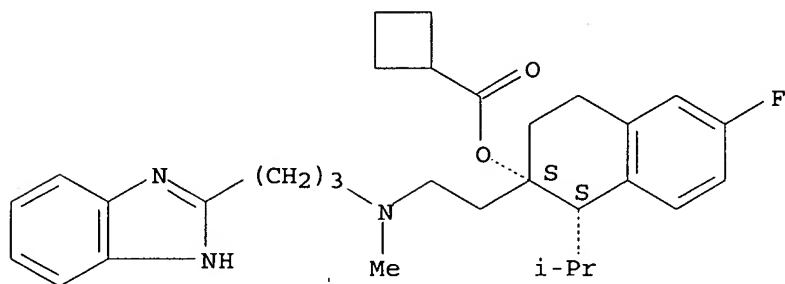


● 2 HCl

RN 357400-15-8 HCAPLUS

CN Cyclobutanecarboxylic acid, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

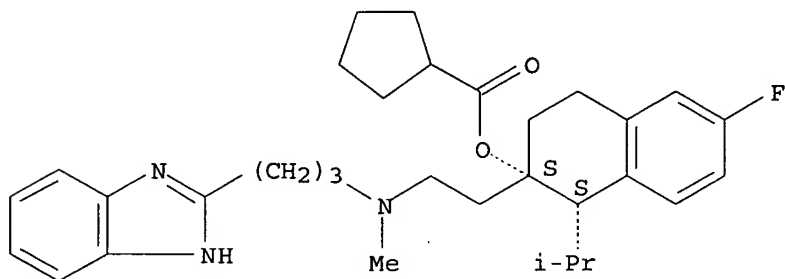
Absolute stereochemistry.



RN 357400-16-9 HCAPLUS

CN Cyclopentanecarboxylic acid, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

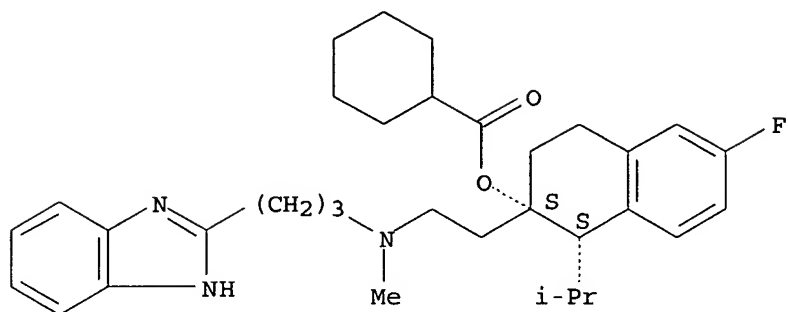
Absolute stereochemistry.



RN 357400-17-0 HCAPLUS

CN Cyclohexanecarboxylic acid, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

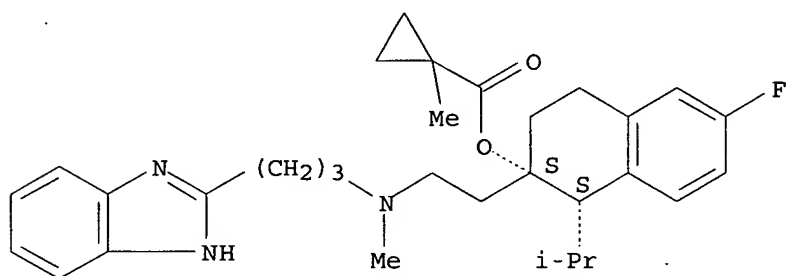
Absolute stereochemistry.



RN 357400-18-1 HCAPLUS

CN Cyclopropanecarboxylic acid, 1-methyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

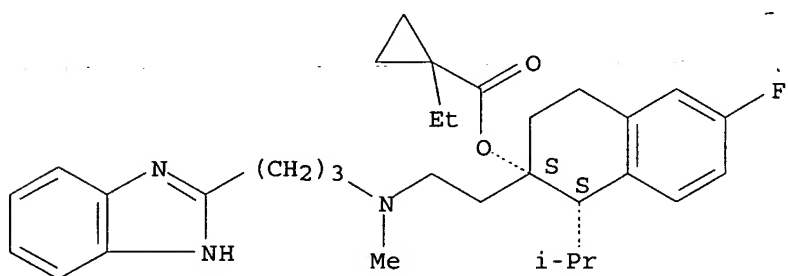
Absolute stereochemistry.



RN 357400-19-2 HCAPLUS

CN Cyclobutanecarboxylic acid, 1-ethyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

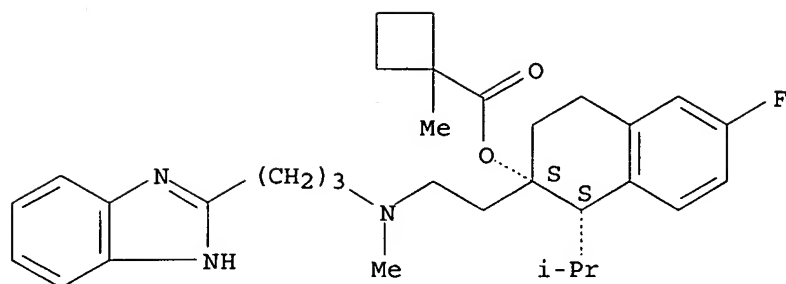
Absolute stereochemistry.



RN 357400-21-6 HCAPLUS

CN Cyclobutanecarboxylic acid, 1-methyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

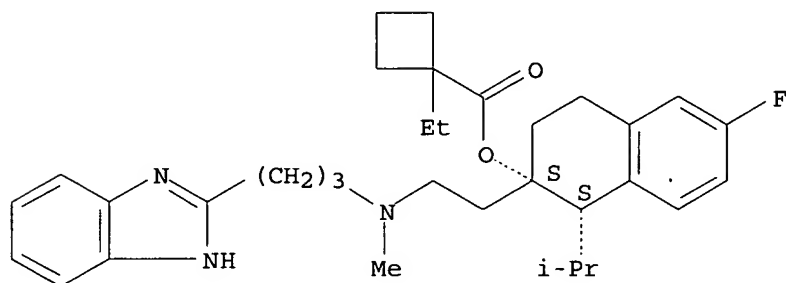
Absolute stereochemistry.



RN 357400-22-7 HCAPLUS

CN Cyclobutanecarboxylic acid, 1-ethyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

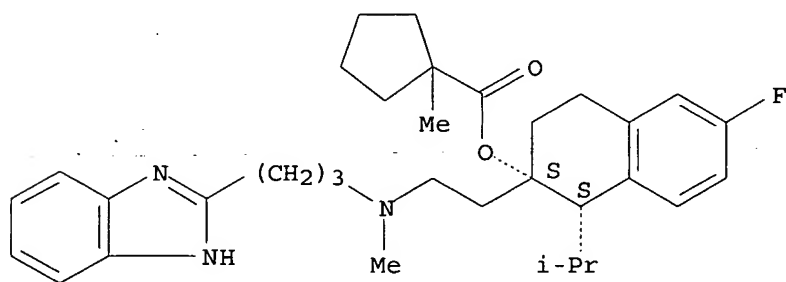
Absolute stereochemistry.



RN 357400-24-9 HCAPLUS

CN Cyclopentanecarboxylic acid, 1-methyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

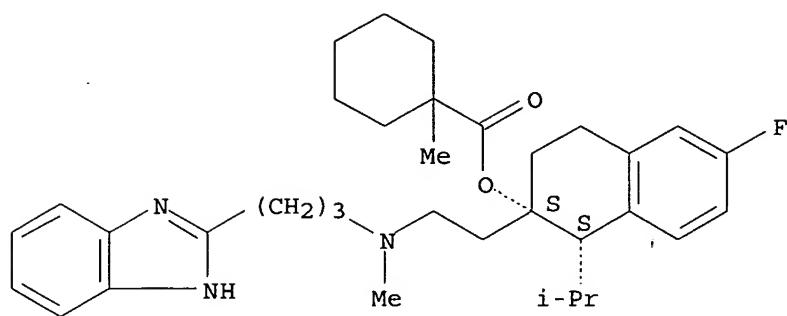
Absolute stereochemistry.



RN 357400-25-0 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-methyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 22 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:636057 HCAPLUS

DOCUMENT NUMBER: 135:211038

TITLE: Preparation of mibefradil analogs for use in the therapy of type 1 and type 2 diabetes

INVENTOR(S): Li, Ming; Hansen, John Bondo; Tagmose, Tina Moller

PATENT ASSIGNEE(S): South Alabama Medical Science Foundation, USA; Novo Nordisk A/S

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

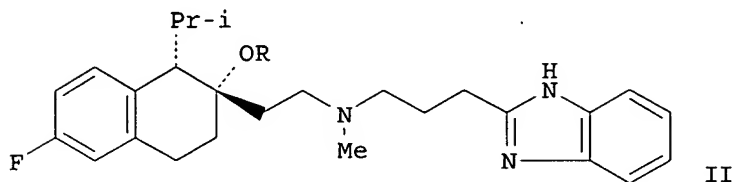
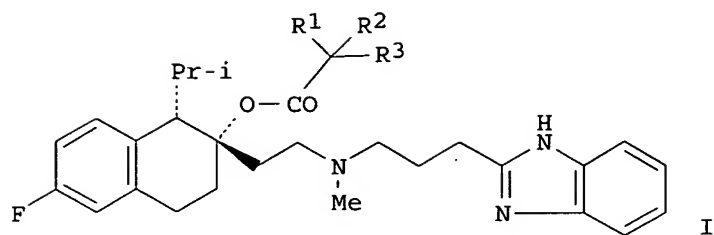
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE            |
|---|------|----------|-----------------|-----------------|
| WO 2001062740   | A1   | 20010830 | WO 2001-DK128   | 20010223 <--    |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |                 |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |                 |
| US 2001049447   | A1   | 20011206 | US 2001-818398  | 20010327 <--    |
| PRIORITY APPLN. INFO.:  |      |          | DK 2000-293     | A 20000225 <--  |
|   |      |          | US 2000-185583P | P 20000228 <--  |
|   |      |          | WO 2001-DK128   | A1 20010223 <-- |

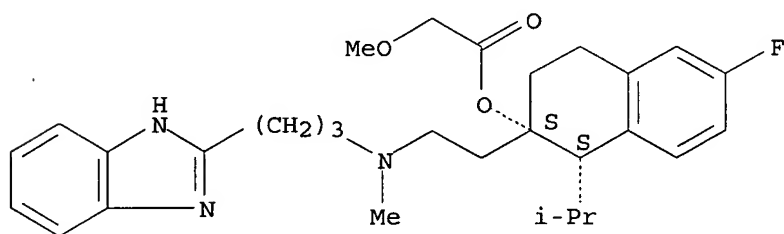
OTHER SOURCE(S): MARPAT 135:211038

GI



- AB Mibefradil analogs, I (R1, R2 and R3 independently = H, C1-6 alkyl, C3-6 cycloalkyl, C3-6-cycloalkyl-C1-6-alkyl, C1-6-alkyl-C3-6-cycloalkyl or a pharmaceutically acceptable salt) were prepared for use in the treatment and/or prevention of type 1 and type 2 diabetes as well as microvascular or macrovascular diseases associated with diabetes. Thus II (R = COBu) was prepared in 84% yield and the diHCl in 27% yield starting from mibefradil di HCl in ethanol and aqueous NaOH via the intermediate II (R = H) which was further reacted with diisopropylethylamine and valeroyl chloride to yield the free base.
- IT **116666-63-8**, Mibefradil dihydrochloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of mibefradil analogs for use in therapy of type 1 and type 2 diabetes)
- RN **116666-63-8** HCAPLUS
- CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 2 HCl

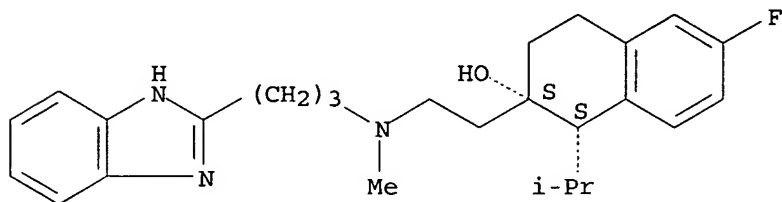
- IT **116666-60-5P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of mibefradil analogs for use in therapy of type 1 and type 2 diabetes)

diabetes)

RN 116666-60-5 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 357401-28-6P

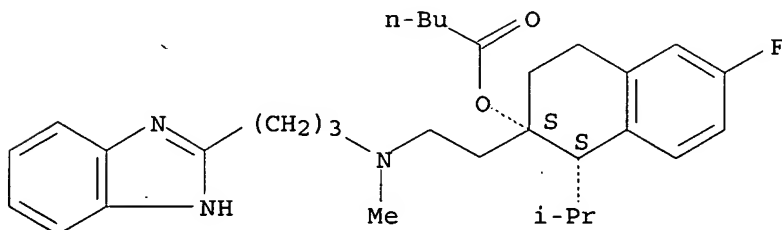
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of mibefradil analogs for use in therapy of type 1 and type 2 diabetes)

RN 357401-28-6 HCAPLUS

CN Pentanoic acid, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 116644-10-1P 357401-29-7P 357401-30-0P

357401-31-1P 357401-32-2P 357401-33-3P

357401-34-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

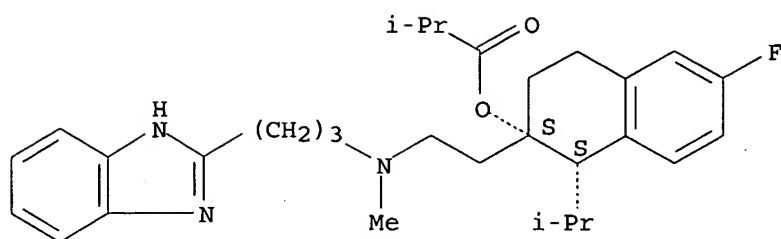
(preparation of mibefradil analogs for use in therapy of type 1 and type 2 diabetes)

RN 116644-10-1 HCAPLUS

CN Propanoic acid, 2-methyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



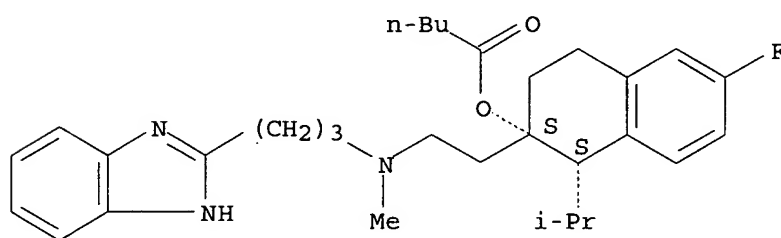


● 2 HCl

RN 357401-29-7 HCAPLUS

CN Pentanoic acid, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

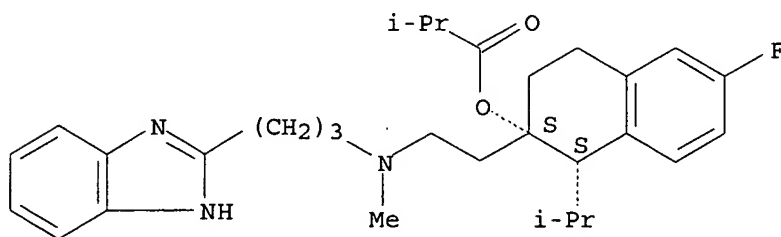


● 2 HCl

RN 357401-30-0 HCAPLUS

CN Propanoic acid, 2-methyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

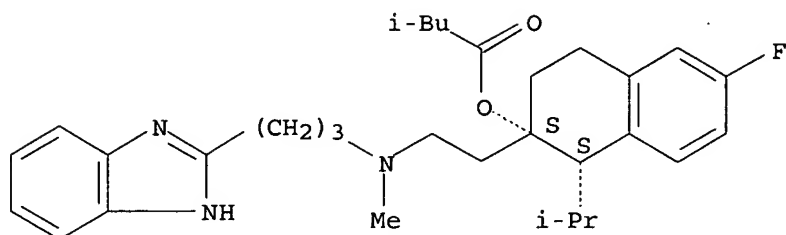


RN 357401-31-1 HCAPLUS

CN Butanoic acid, 3-methyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Searched by P. Ruppel

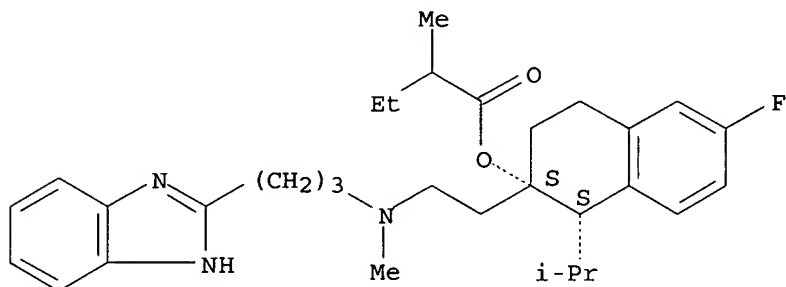
Absolute stereochemistry.



RN 357401-32-2 HCAPLUS

CN Butanoic acid, 2-methyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

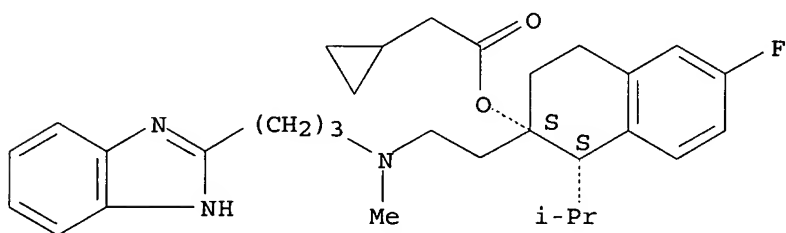
Absolute stereochemistry.



RN 357401-33-3 HCAPLUS

CN Cyclopropaneacetic acid, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

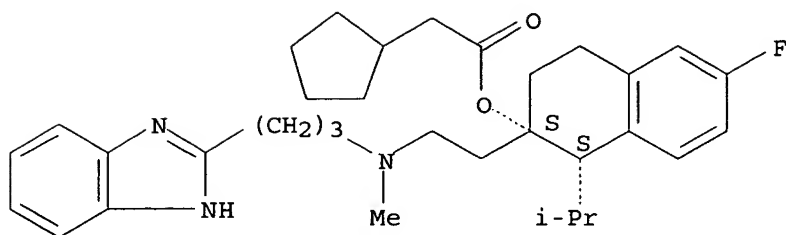
Absolute stereochemistry.



RN 357401-34-4 HCAPLUS

CN Cyclopentaneacetic acid, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 23 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:432825 HCAPLUS

DOCUMENT NUMBER: 135:37185

TITLE: Combination of aldose reductase inhibitors and antihypertensive agents for the treatment of diabetic complications

INVENTOR(S): Mylari, Banavara Lakshman

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE            |
|---|------|----------|-----------------|-----------------|
| EP 1106210  | A2   | 20010613 | EP 2000-310719  | 20001201 <--    |
| EP 1106210  | A3   | 20031203 |                 |                 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO |      |          |                 |                 |
| US 2002068740   | A1   | 20020606 | US 2000-727958  | 20001201 <--    |
| CA 2327575  | AA   | 20010607 | CA 2000-2327575 | 20001205 <--    |
| JP 2001163805   | A2   | 20010619 | JP 2000-369434  | 20001205 <--    |
| BR 2000005765   | A    | 20010717 | BR 2000-5765    | 20001207 <--    |
| US 2003050301   | A1   | 20030313 | US 2002-280388  | 20021025 <--    |
| PRIORITY APPLN. INFO.:  |      |          | US 1999-169380P | P 19991207 <--  |
|   |      |          | US 2000-727958  | A3 20001201 <-- |

AB This invention is directed to methods, pharmaceutical compns. and kits comprising an aldose reductase inhibitor (ARI), a prodrug thereof or a pharmaceutically acceptable salt of said ARI or said prodrug and an antihypertensive agent, a prodrug thereof or a pharmaceutically acceptable salt of said antihypertensive agent or said prodrug. This invention further relates to methods of using those pharmaceutical compns. for the treatment of diabetic complications such as diabetic neuropathy, diabetic nephropathy, diabetic retinopathy, myocardial infarction, cataracts and diabetic cardiomyopathy.

IT 116644-53-2, Mibefradil

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

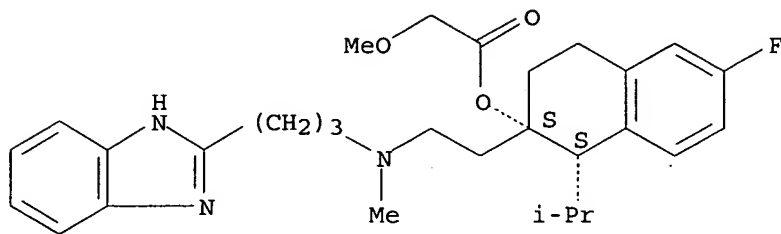
(compns. containing aldose reductase inhibitors and antihypertensive agents for treatment of diabetic complications)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-

2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 24 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:394086 HCAPLUS

DOCUMENT NUMBER: 135:523

TITLE: Use of the calcium channel blocker mibefradil for the inhibition of epithelial cell adhesion

INVENTOR(S): Beck, Ria; Guthoff, Rolf; Nebe, Barbara; Rychly, Joachim

PATENT ASSIGNEE(S): Germany

SOURCE: Ger. Offen., 6 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE         |
|-------------|------|----------|------------------|--------------|
| DE 19954788 | A1   | 20010531 | DE 1999-19954788 | 19991115 <-- |

PRIORITY APPLN. INFO.: DE 1999-19954788 19991115 <--

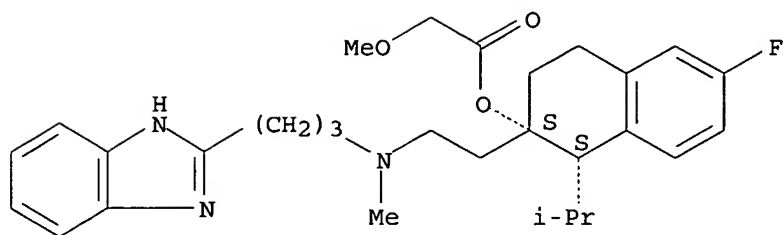
AB The invention discloses a new application/indication of the T-type calcium channel blocker mibefradil dihydrochloride for the inhibition of epithelial cell adhesion in surgical ophthalmol. The invention relates to the problem of after-cataract formation following artificial lens implantation, and suggests a new application for mibefradil for the inhibition of epithelial cells with which it is possible to permanently prevent after-cataract formation. Mibefradil may also be used to inhibit epithelial cell adhesion in vitro.

IT **116644-53-2**, Mibefradil **116666-63-8**, Mibefradil dihydrochloride  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (mibefradil for inhibition of epithelial cell adhesion)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

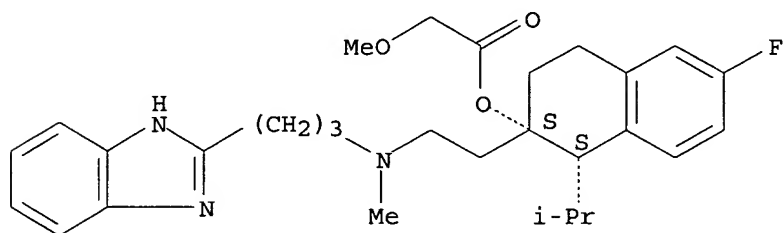
Absolute stereochemistry.



RN 116666-63-8 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 2 HCl

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 25 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:338762 HCAPLUS

DOCUMENT NUMBER: 134:362292

TITLE: Methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile

INVENTOR(S): Farr, Spencer

PATENT ASSIGNEE(S): Phase-1 Molecular Toxicology, USA

SOURCE: PCT Int. Appl., 222 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE         |
|---------------|------|----------|-----------------|--------------|
| WO 2001032928 | A2   | 20010510 | WO 2000-US30474 | 20001103 <-- |
| WO 2001032928 | A3   | 20020725 |                 |              |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

Searched by P. Ruppel

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-165398P P 19991105 <--  
US 2000-196571P P 20000411 <--

AB The invention discloses methods, gene databases, gene arrays, protein arrays, and devices that may be used to determine the hypersensitivity of individuals to a given agent, such as drug or other chemical, in order to prevent toxic side effects. In one embodiment, methods of identifying hypersensitivity in a subject by obtaining a gene expression profile of multiple genes associated with hypersensitivity of the subject suspected to be hypersensitive, and identifying in the gene expression profile of the subject a pattern of gene expression of the genes associated with hypersensitivity are disclosed. The gene expression profile of the subject may be compared with the gene expression profile of a normal individual and a hypersensitive individual. The gene expression profile of the subject that is obtained may comprise a profile of levels of mRNA or cDNA. The gene expression profile may be obtained by using an array of nucleic acid probes for the plurality of genes associated with hypersensitivity. The expression of the genes predetd. to be associated with hypersensitivity is directly related to prevention or repair of toxic damage at the tissue, organ or system level. Gene databases arrays and apparatus useful for identifying hypersensitivity in a subject are also disclosed.

IT 116644-53-2, Mibefradil

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(methods of determining individual hypersensitivity to a pharmaceutical

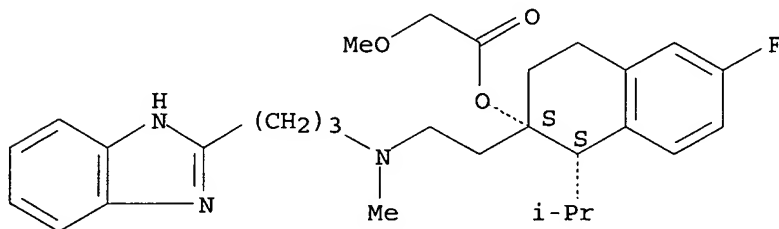
agent

from gene expression profile)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 26 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:152667 HCAPLUS

DOCUMENT NUMBER: 134:188175

TITLE: The use of fluorescein aryl ethers in high throughput cytochrome P450 inhibition assays

INVENTOR(S): Miller, Vaughn P.; Stresser, David; Crespi, Charles L.

PATENT ASSIGNEE(S): Gentest Corporation, USA

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

Searched by P. Ruppel

## PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE           |
|---|------|----------|-----------------|----------------|
| WO 2001014361   | A1   | 20010301 | WO 2000-US21894 | 20000810 <--   |
| W: JP   |      |          |                 |                |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE                            |      |          |                 |                |
| EP 1210342  | A1   | 20020605 | EP 2000-957373  | 20000810 <--   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL |      |          |                 |                |
| US 6420131  | B1   | 20020716 | US 2000-636332  | 20000810 <--   |
| JP 2003507466   | T2   | 20030225 | JP 2001-518448  | 20000810 <--   |
| PRIORITY APPLN. INFO.:  |      |          | US 1999-149762P | P 19990819 <-- |
|   |      |          | US 1999-150044P | P 19990820 <-- |
|   |      |          | WO 2000-US21894 | W 20000810 <-- |

OTHER SOURCE(S): MARPAT 134:188175

AB Fluorescent substrates of human cytochrome P 450 enzymes are provided. Also provided are methods for their manufacture and use. These substrates are useful in assessing cytochrome P 450 enzyme activity and in selecting compds. which inhibit cytochrome P 450 enzyme activity and, in particular, for identifying potential adverse drug interactions which are mediated by inhibition of cytochrome P 450 enzyme activity.

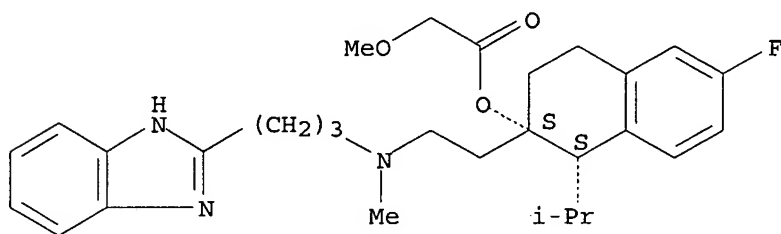
IT 116644-53-2, Mibefradil

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(fluorescein aryl ethers for high throughput cytochrome P 450 inhibition assay)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 27 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:227505 HCAPLUS

DOCUMENT NUMBER: 132:260692

TITLE: Methods and pharmaceutical compositions using 5 $\alpha$ -reductase inhibitors combined with calcium channel blockers for treating androgen-related conditions

INVENTOR(S): Waldstreicher, Joanne; Wang, Daniel Z.

PATENT ASSIGNEE(S): Merck &amp; Co., Inc., USA

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

Searched by P. Ruppel

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE           |
|---|------|----------|-----------------|----------------|
| WO 2000018402   | A1   | 20000406 | WO 1999-US22225 | 19990924 <--   |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM<br>RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |      |          |                 |                |
| US 6268377  | B1   | 20010731 | US 1999-401135  | 19990922 <--   |
| AU 9962638  | A1   | 20000417 | AU 1999-62638   | 19990924 <--   |
| PRIORITY APPLN. INFO.:  |      |          | US 1998-102018P | P 19980928 <-- |
|   |      |          | WO 1999-US22225 | W 19990924 <-- |

OTHER SOURCE(S): MARPAT 132:260692

AB The invention provides for the combined use of 5 $\alpha$ -reductase inhibitors together with calcium channel blockers for the treatment of benign prostatic hyperplasia (BPH), prostate cancer, prostatitis, hematuria, and other androgen related disorders, including prostatitis and the prevention of prostate cancer. The invention provides a method of treatment which is useful in the treatment of benign prostatic hyperplasia, prostatitis, and/or the prevention and treatment of prostatic cancer, as well as in the treatment of prostatitis and hematuria. The invention also provides a pharmaceutical composition which is useful in the treatment of benign prostatic hyperplasia, prostatitis, hematuria and/or the prevention and treatment of prostatic cancer, wherein the pharmaceutical composition comprises the combination of a 5 $\alpha$ -reductase inhibitor and a calcium channel blocking agent.

IT 116644-53-2, Mibefradil

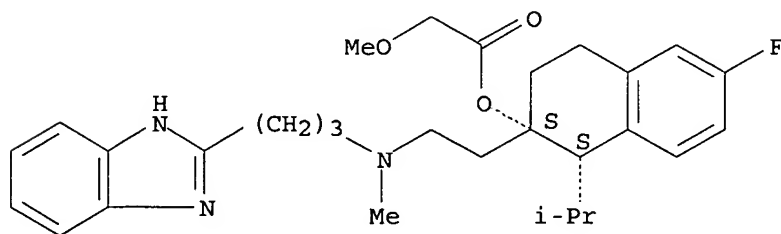
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combined use of 5 $\alpha$ -reductase inhibitors and calcium channel blockers for treating androgen-related conditions)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Searched by P. Ruppel



L26 ANSWER 28 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2000:191261 HCAPLUS  
 DOCUMENT NUMBER: 132:232751  
 TITLE: sequence and therapeutic applications for rat  
 pancreatic T-type calcium channel as it relates to  
 diabetes  
 INVENTOR(S): Li, Ming  
 PATENT ASSIGNEE(S): South Alabama Medical Science Foundation, USA  
 SOURCE: PCT Int. Appl., 124 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE           |
|---|------|----------|-----------------|----------------|
| WO 2000015845   | A1   | 20000323 | WO 1999-US19675 | 19990826 <--   |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |                |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |                |
| CA 2340586  | AA   | 20000323 | CA 1999-2340586 | 19990826 <--   |
| AU 9960217  | A1   | 20000403 | AU 1999-60217   | 19990826 <--   |
| EP 1108068  | A1   | 20010620 | EP 1999-969121  | 19990826 <--   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO   |      |          |                 |                |
| JP 2002525077   | T2   | 20020813 | JP 2000-570372  | 19990826 <--   |
| US 2003125269   | A1   | 20030703 | US 1999-383894  | 19990826 <--   |
| PRIORITY APPLN. INFO.:  |      |          |                 |                |
|   |      |          | US 1998-98004P  | P 19980826 <-- |
|   |      |          | US 1999-117399P | P 19990127 <-- |
|   |      |          | WO 1999-US19675 | W 19990826 <-- |

AB The present invention is directed to isolated nucleic acid mols. encoding pancreatic T-type calcium channels and vectors and host cells comprising such. The invention is further directed to methods and compns. which modulate the expression of pancreatic T-type calcium channels, including antisense. An isolated pancreatic T-type calcium channel protein is provided, as well as antibodies directed to such protein. Pharmaceutical compns. and methods of treatment involving pancreatic T-type calcium channels are also provided. The pharmacol. of Mibefradil action is also discussed and shows that T-type  $\text{Ca}^{2+}$  current is more sensitive to mibefradil than the L-type  $\text{Ca}^{2+}$  current in pancreatic  $\beta$ -cells. The results also shows that the inhibitory effect of mibefradil on T-type  $\text{Ca}^{2+}$  current in pancreatic  $\beta$ -cells results from reversible interaction between the drug and the channel protein. Inhibition of T-type Calcium channels was also shown with a Mibefradil metabolite. Further, it was shown that Streptozotocin induced high basal  $[\text{Ca}^{2+}]$  inhibits KCL stimulated  $\text{Ca}^{2+}$  influx. In addition, it was shown that low voltage-activated  $\text{Ca}^{2+}$  current mediates cytokine-induced mouse pancreatic  $\beta$ -cell death. The relationship of this gene to NIDDM (non-insulin-dependent diabetes mellitus) is described. The data suggest that T-type calcium channels are a primary regulator of resting basal  $[\text{Ca}^{2+}]$  in  $\beta$ -cells. Applications of antisense DNA are revealed which modulate this gene's expression by blocking translation. Expression of a ribozyme is described which results in decreased expression of this rat pancreatic T-type calcium channel. Oligonucleotide probes for genomic or cDNA library screening are also

described along with monoclonal and polyclonal antibodies. Methods for modulation of L-type calcium channels by modifying levels of functional T-type calcium channels is also discussed. Lastly, DNA primers are also mentioned to be used in a PCR reaction for amplification of this gene.

IT 116644-53-2, Mibefradil

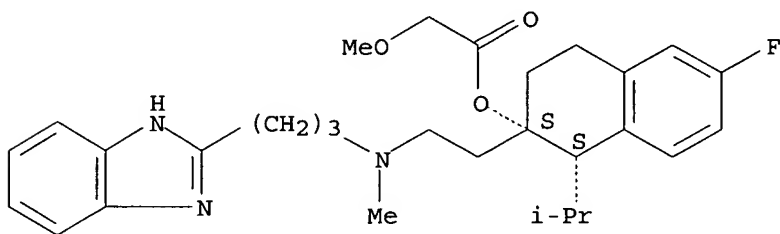
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(sequence and therapeutic applications for rat pancreatic T-type calcium channel as it relates to diabetes)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 29 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:161149 HCAPLUS

DOCUMENT NUMBER: 132:203141

TITLE: Anti-pressor agents and methods for remodeling neuronal and cardiovascular pathways for the long term management of sexual dysfunction

INVENTOR(S): Adams, Michael A.; Heaton, Jeremy P. W.

PATENT ASSIGNEE(S): Queen's University At Kingston, Can.

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE         |
|---------------|--|----------|-----------------|--------------|
| WO 2000012110 | A2   | 20000309 | WO 1999-CA787   | 19990825 <-- |
| WO 2000012110 | A3   | 20000803 |                 |              |
| W:            | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |          |                 |              |
| RW:           | GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG   |          |                 |              |
| CA 2340206    | AA   | 20000309 | CA 1999-2340206 | 19990825 <-- |
| AU 9954034    | A1   | 20000321 | AU 1999-54034   | 19990825 <-- |

Searched by P. Ruppel

EP 1235563 A2 20020904 EP 1999-939874 19990825 &lt;--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, ALPRIORITY APPLN. INFO.: US 1998-98178P P 19980826 <--  
WO 1999-CA787 W 19990825 <--

AB The invention provides a method of administration of an agent which acts to remodel neuronal or vascular pathways for the long term management of sexual dysfunction in both males and females. In a preferred embodiment, the invention provides a method of ameliorating or reversing pathogenic vascular degradative modeling in the ilio-hypogastric-pudendal arterial bed and genitalia comprising administering to a human patient in need of such treatment a therapeutically effective amount of an anti-pressor agent. The anti-pressor agent comprises one or more compds. selected from the therapeutic classes of direct vasodilators such as hydralazine and NO donors, ACE inhibitors, angiotensin-II receptor antagonists,  $\alpha$ 1-adrenergic receptor antagonists,  $\beta$ -adrenergic receptor antagonists, calcium channel blockers, and phosphodiesterase inhibitors. The anti-pressor agent may be co-administered with a diuretic compound, and is administered either chronically at low dose, or for short periods of time at doses higher than are typically used for the treatment of hypertension. In certain embodiments of the method of the invention, the anti-pressor agent is co-administered with a diuretic agent and/or prostaglandin-E1.

IT 116644-53-2, Mibefradil

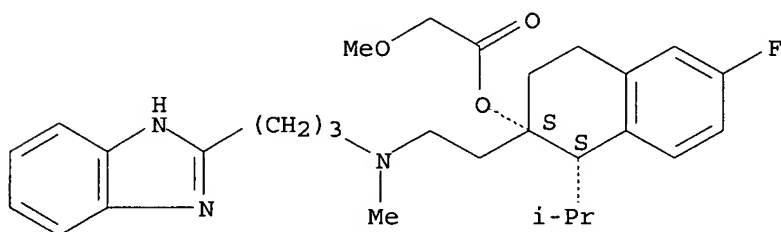
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-pressor agents and methods for remodeling neuronal and cardiovascular pathways for long term management of sexual dysfunction)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 30 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:83199 HCAPLUS

DOCUMENT NUMBER: 132:113122

TITLE: Water-soluble tablet containing sildenafil

INVENTOR(S): Struengmann, Thomas

PATENT ASSIGNEE(S): Hexal A.-G., Germany

SOURCE: Ger. Offen., 4 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

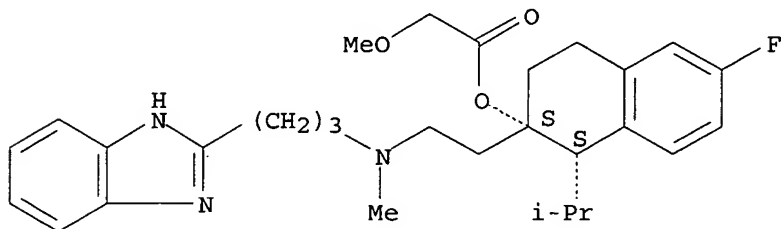
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE           |
|---|------|----------|------------------|----------------|
| DE 19834507   | A1   | 20000203 | DE 1998-19834507 | 19980731 <--   |
| WO 2000007596   | A1   | 20000217 | WO 1999-EP5464   | 19990730 <--   |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,<br>DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,<br>KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,<br>NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,<br>UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM<br>RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,<br>ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,<br>CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |      |          |                  |                |
| AU 9954156  | A1   | 20000228 | AU 1999-54156    | 19990730 <--   |
| PRIORITY APPLN. INFO.:  |      |          | DE 1998-19834507 | A 19980731 <-- |
|   |      |          | WO 1999-EP5464   | W 19990730 <-- |
| AB Sildenafil (Viagra) or 1 of its pharmaceutically acceptable salts is<br>administered in a water-soluble tablet formulation to hasten its onset of<br>action in inducing an erection. The composition may addnl. contain a<br>cytochrome P 450 inhibitor to decrease the rate of sildenafil metabolism and<br>increase its plasma concentration The composition is resorbed well, and<br>patient compliance is good.  |      |          |                  |                |
| IT 116644-53-2, Mibefradil<br>RL: BAC (Biological activity or effector, except adverse); BSU (Biological<br>study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES<br>(Uses)<br>(water-soluble tablet containing sildenafil)  |      |          |                  |                |
| RN 116644-53-2 HCAPLUS  |      |          |                  |                |
| CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-<br>yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-,<br>2-naphthalenyl ester (9CI) (CA INDEX NAME)  |      |          |                  |                |

Absolute stereochemistry.



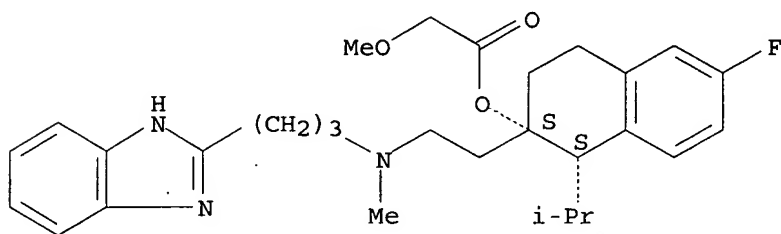
L26 ANSWER 31 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2000:83198 HCAPLUS  
 DOCUMENT NUMBER: 132:113121  
 TITLE: Transmucosal therapeutic system for the use of  
 sildenafil  
 INVENTOR(S): Struengmann, Thomas  
 PATENT ASSIGNEE(S): Hexal A.-G., Germany  
 SOURCE: Ger. Offen., 4 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

Searched by P. Ruppel

-----  
 DE 19834506 A1 20000203 DE 1998-19834506 19980731 <--  
 WO 2000007597 A1 20000217 WO 1999-EP5465 19990730 <--  
 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,  
 DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,  
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,  
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,  
 UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 AU 9952898 A1 20000228 AU 1999-52898 19990730 <--  
 PRIORITY APPLN. INFO.: DE 1998-19834506 A 19980731 <--  
 WO 1999-EP5465 W 19990730 <--  
 AB Sildenafil (Viagra) or 1 of its pharmaceutically acceptable salts is  
 administered transmucosally as a spray, cream, gel, powder, or drops to  
 hasten its onset of action in inducing an erection. This mode of  
 administration improves the drug bioavailability and thereby decreases the  
 dosage required and the risk of side effects. The composition may addnl.  
 contain a cytochrome P 450 inhibitor to decrease the rate of sildenafil  
 metabolism and increase its plasma concentration The composition does not  
 irritate the  
 mucosa.  
 IT 116644-53-2, Mibefradil  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)  
 (transmucosal therapeutic system for use of sildenafil)  
 RN 116644-53-2 HCAPLUS  
 CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-  
 yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-  
 2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 32 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2000:83197 HCAPLUS  
 DOCUMENT NUMBER: 132:113120  
 TITLE: Transdermal therapeutic system for the use of  
 sildenafil  
 INVENTOR(S): Struengmann, Thomas; Spaeth, Wolfgang  
 PATENT ASSIGNEE(S): Hexal A.-G., Germany  
 SOURCE: Ger. Offen., 4 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE         |
|-------------|------|----------|------------------|--------------|
| DE 19834505 | A1   | 20000203 | DE 1998-19834505 | 19980731 <-- |

PRIORITY APPLN. INFO.: DE 1998-19834505 19980731 <--

AB Sildenafil (Viagra) or 1 of its pharmaceutically acceptable salts is used as a topical cream, lotion, or transdermal plaster to hasten its onset of action in inducing an erection. This mode of administration improves the drug bioavailability and bypasses the 1st-pass effect in metabolism of the drug by the liver, and thereby decreases the dosage required and the risk of side effects. The composition may addnl. contain a cytochrome P 450 inhibitor to decrease the rate of sildenafil metabolism and increase its plasma concentration The topical or transdermal dosage form can be removed after

use to avoid the occurrence of priapism.

IT 116644-53-2, Mibefradil

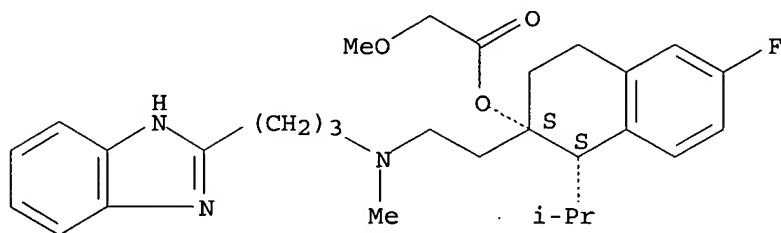
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(transdermal therapeutic system for use of sildenafil)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 33 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:53366 HCAPLUS

DOCUMENT NUMBER: 132:88204

TITLE: Method of treatment and pharmaceutical composition using valsartan-calcium channel blocker combination

INVENTOR(S): De Gasparo, Marc; Webb, Randy Lee

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.

SOURCE: PCT Int. Appl., 14 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE         |
|---------------|------|----------|-----------------|--------------|
| WO 2000002543 | A2   | 20000120 | WO 1999-EP4842  | 19990709 <-- |
| WO 2000002543 | A3   | 20000629 |                 |              |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,

MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
 TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
 MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

|  |    |          |                   |                |
|--|----|----------|-------------------|----------------|
| CA 2336822   | AA | 20000120 | CA 1999-2336822   | 19990709 <--   |
| AU 9950349   | A1 | 20000201 | AU 1999-50349     | 19990709 <--   |
| AU 753486  | B2 | 20021017 |                   |                |
| BR 9912021   | A  | 20010403 | BR 1999-12021     | 19990709 <--   |
| EP 1096932   | A2 | 20010509 | EP 1999-934647    | 19990709 <--   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO |    |          |                   |                |
| TR 200100062   | T2 | 20010621 | TR 2001-200100062 | 19990709 <--   |
| JP 2002520274  | T2 | 20020709 | JP 2000-558803    | 19990709 <--   |
| NZ 509260  | A  | 20030926 | NZ 1999-509260    | 19990709 <--   |
| NO 2001000113  | A  | 20010309 | NO 2001-113       | 20010108 <--   |
| ZA 2001000232  | A  | 20020409 | ZA 2001-232       | 20010109 <--   |
| PRIORITY APPLN. INFO.:   |    |          | US 1998-113893    | A 19980710 <-- |
|  |    |          | WO 1999-EP4842    | W 19990709 <-- |

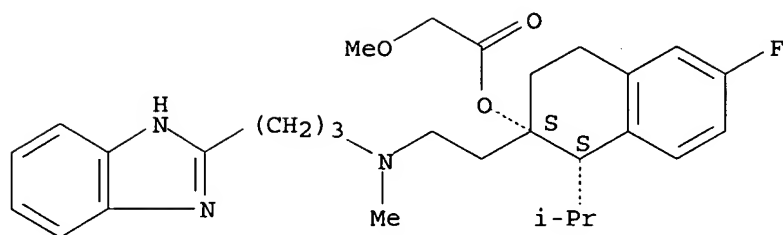
AB A method is provided for the treatment or prevention of a condition or disease selected from hypertension, (acute and chronic) congestive heart failure, left ventricular dysfunction and hypertrophic cardiomyopathy, myocardial infarction and its sequelae supraventricular and ventricular arrhythmias, atrial fibrillation or atrial flutter, atherosclerosis, angina (whether stable or unstable), renal insufficiency (diabetic and non-diabetic), heart failure, angina pectoris, diabetes, hypertension in patients with NIDDM, secondary aldosteronism, primary and secondary pulmonary hyperaldosteronism, primary and pulmonary hypertension, renal failure conditions, such as diabetic nephropathy, glomerulonephritis, scleroderma, glomerular sclerosis, proteinuria of primary renal disease, and also renal vascular hypertension, diabetic retinopathy, the management of other vascular disorders, such as migraine, Raynaud's disease, luminal hyperplasia, cognitive dysfunction (such as Alzheimer's), and stroke, comprising administering a therapeutically effective amount of combination of (i) the AT1-antagonist valsartan or a pharmaceutically acceptable salt thereof and (ii) a calcium channel blocker or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier to a mammal in need of such treatment. A corresponding pharmaceutical combination composition is also provided.

IT 116644-53-2, Mibefradil  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (valsartan-calcium channel blocker pharmaceutical combination)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 34 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1999:819361 HCAPLUS  
 DOCUMENT NUMBER: 132:44979  
 TITLE: Nitrate salts of antihypertensive medicines  
 INVENTOR(S): Del, Soldato Piero  
 PATENT ASSIGNEE(S): Nicox S. A., Fr.  
 SOURCE: PCT Int. Appl., 77 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE            |
|---|------|----------|-----------------|-----------------|
| WO 9967231  | A1   | 19991229 | WO 1999-EP4138  | 19990615 <--    |
| W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HR, HU, IL, IN, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |                 |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |                 |
| IT 1301759  | B1   | 20000707 | IT 1998-MI1408  | 19980619 <--    |
| CA 2335356  | AA   | 19991229 | CA 1999-2335356 | 19990615 <--    |
| AU 9945139  | A1   | 20000110 | AU 1999-45139   | 19990615 <--    |
| AU 770387   | B2   | 20040219 |                 |                 |
| EP 1087953  | A1   | 20010404 | EP 1999-927990  | 19990615 <--    |
| EP 1087953  | B1   | 20041117 |                 |                 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, SI, LT, FI, RO   |      |          |                 |                 |
| BR 9911305  | A    | 20011023 | BR 1999-11305   | 19990615 <--    |
| JP 2002518492   | T2   | 20020625 | JP 2000-555885  | 19990615 <--    |
| RU 2235097  | C2   | 20040827 | RU 2000-131690  | 19990615 <--    |
| ZA 2000006136   | A    | 20020130 | ZA 2000-6136    | 20001030 <--    |
| US 6645965  | B1   | 20031111 | US 2000-719164  | 20001212 <--    |
| US 2004147575   | A1   | 20040729 | US 2003-671746  | 20030929 <--    |
| PRIORITY APPLN. INFO.:  |      |          |                 |                 |
|   |      |          | IT 1998-MI1408  | A 19980619 <--  |
|   |      |          | WO 1999-EP4138  | W 19990615 <--  |
|   |      |          | US 2000-719164  | A3 20001212 <-- |

OTHER SOURCE(S): MARPAT 132:44979

AB Nitric acid salts of drugs have antihypertensive activity. Some example salts prepared and showing antihypertensive activity were: timolol, propranolol, sildenafil, valsartan, hydralazine, nicardipine, verapamil, and amiloride nitrate salts.

IT 252951-80-7

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (nitrate salts of antihypertensive medicines)

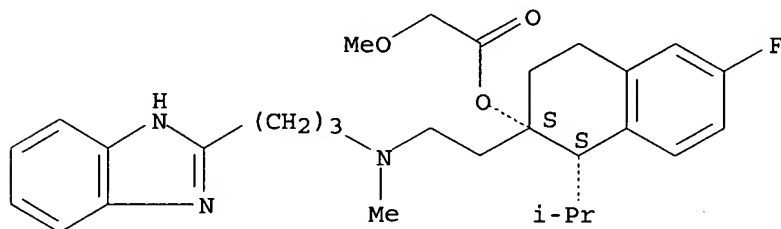


RN 252951-80-7 HCAPLUS  
 CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, nitrate (9CI) (CA INDEX NAME)

CM 1

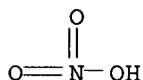
CRN 116644-53-2  
 CMF C29 H38 F N3 O3

Absolute stereochemistry.



CM 2

CRN 7697-37-2  
 CMF H N O3



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 35 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1999:795648 HCAPLUS  
 DOCUMENT NUMBER: 132:35723  
 TITLE: Multibinding, multimeric ligands comprising calcium channel blockers  
 INVENTOR(S): Ji, Yu-Hau; Natarajan, Maya; Griffin, John H.  
 PATENT ASSIGNEE(S): Advanced Medicine, Inc., USA  
 SOURCE: PCT Int. Appl., 166 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 31  
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE         |
|------------|------|----------|-----------------|--------------|
| WO 9963992 | A1   | 19991216 | WO 1999-US12672 | 19990607 <-- |
| WO 9963992 | C2   | 20020822 |                 |              |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,

Searched by P. Ruppel

MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2318806 AA 19991216 CA 1999-2318806 19990607 <--  
CA 2318901 AA 19991216 CA 1999-2318901 19990607 <--  
CA 2319142 AA 19991216 CA 1999-2319142 19990607 <--  
CA 2319153 AA 19991216 CA 1999-2319153 19990607 <--  
WO 9963984 A1 19991216 WO 1999-US11801 19990607 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

WO 9963932 A2 19991216 WO 1999-US12724 19990607 <--  
WO 9963932 A3 20000203

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

WO 9964045 A1 19991216 WO 1999-US12754 19990607 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9945493 A1 19991230 AU 1999-45493 19990607 <--  
AU 9945511 A1 19991230 AU 1999-45511 19990607 <--  
AU 9946726 A 19991230 AU 1999-46726 19990607 <--  
EP 1085863 A1 20010328 EP 1999-928427 19990607 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

EP 1085879 A2 20010328 EP 1999-928442 19990607 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

EP 1085890 A1 20010328 EP 1999-930122 19990607 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

EP 1089749 A1 20010411 EP 1999-928447 19990607 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

JP 2002517437 T2 20020618 JP 2000-553053 19990607 <--  
JP 2002517440 T2 20020618 JP 2000-553061 19990607 <--  
SG 80038 A1 20010417 SG 1999-2716 19990608 <--  
ZA 2000004562 A 20011130 ZA 2000-4562 20000831 <--  
ZA 2000004563 A 20011130 ZA 2000-4563 20000831 <--  
ZA 2000004564 A 20011130 ZA 2000-4564 20000831 <--

US 2003044845 A1 20030306 US 2002-75017 20020213 <--  
 PRIORITY APPLN. INFO.: US 1998-88465P P 19980608 <--  
 US 1998-93068P P 19980716 <--  
 US 1998-103866P P 19981012 <--  
 US 1999-327096 B1 19990607 <--  
 WO 1999-US11801 W 19990607 <--  
 WO 1999-US12672 W 19990607 <--  
 WO 1999-US12724 W 19990607 <--  
 WO 1999-US12754 W 19990607 <--  
 US 2000-499176 B1 20000207 <--

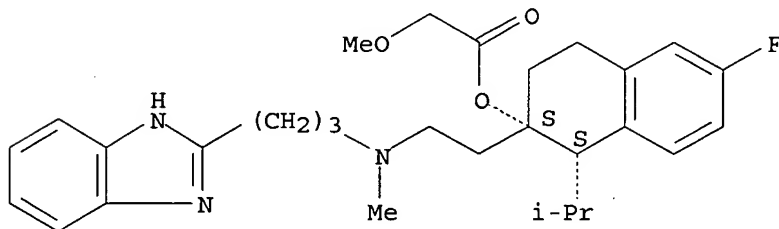
AB Novel multibinding compds., which are multimeric ligands, are disclosed. The compds. comprise 2-10 ligands, covalently connected via 1-20 linkers, with each ligand being capable of binding to a ligand-binding site in a Ca++ channel. The ligands may be selected from representative calcium channel blockers, including verapamil, diltiazem, benizazem, clentiazem, nicardipine, nifedipine, nilvadipine, nitrendipine, nimodipine, isradipine, lacidipine, amlodipine, nisoldipine, felodipine, bepridil, mibefradil, SQ 32910, and SQ 32428. The ligands may be identified via a combinatorial library based upon varying ligands and/or linkers. Several prophetic examples are given, using amlodipine, verapamil, diltiazem, and other ligand components.

IT 116644-53-2DP, Mibefradil, dimeric and multimeric derivs.  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of multibinding multimeric ligands comprising calcium channel blockers)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 36 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:377851 HCAPLUS

DOCUMENT NUMBER: 131:29119

TITLE: Low-voltage activated calcium channel proteins and cDNAs encoding them and the development of calcium channel blockers

INVENTOR(S): Williams, Mark; Stauderman, Kenneth; Harpold, Michael; Hans, Michael; Urrutia, Arturo; Washburn, Mark S.

PATENT ASSIGNEE(S): Sibia Neurosciences, Inc., USA

SOURCE: PCT Int. Appl., 171 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE            |
|---|------|----------|-----------------|-----------------|
| WO 9928342  | A2   | 19990610 | WO 1998-US25671 | 19981203 <--    |
| WO 9928342  | A3   | 19990826 |                 |                 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |                 |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |                 |
| US 6528630  | B1   | 20030304 | US 1997-984709  | 19971203 <--    |
| CA 2312195  | AA   | 19990610 | CA 1998-2312195 | 19981203 <--    |
| AU 9918026  | A1   | 19990616 | AU 1999-18026   | 19981203 <--    |
| AU 760309   | B2   | 20030515 |                 |                 |
| EP 1042468  | A2   | 20001011 | EP 1998-962884  | 19981203 <--    |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO   |      |          |                 |                 |
| JP 2001525161   | T2   | 20011211 | JP 2000-523233  | 19981203 <--    |
| PRIORITY APPLN. INFO.:  |      |          |                 |                 |
|   |      |          | US 1997-984709  | A1 19971203 <-- |
|   |      |          | US 1998-188932  | A 19981110 <--  |
|   |      |          | WO 1998-US25671 | W 19981203 <--  |

AB CDNAs for alternative splicing forms of the  $\alpha 1$  subunit of the T-type or low-voltage activated calcium channel are cloned and characterized. The cDNAs may be used in the development of systems for screening for effectors of the calcium channel for therapeutic use. Candidate clones were first generated by PCR using degenerate primers targeted against sequences encoding conserved regions of the protein. A series of overlapping cDNAs encoding two  $\alpha 1H$  subtypes were obtained and full-length cDNAs constructed. The electrophysiol. and pharmacol. of the channels was studied in *Xenopus* oocytes.

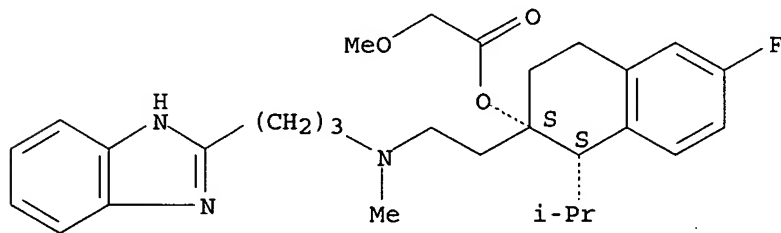
IT 116644-53-2, Mibefradil

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(as calcium channel antagonist; low-voltage activated calcium channel proteins and cDNAs encoding them and development of calcium channel blockers)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



Searched by P. Ruppel

L26 ANSWER 37 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1999:184130 HCAPLUS  
 DOCUMENT NUMBER: 130:205139  
 TITLE: Combination therapy comprising atorvastatin and an antihypertensive agent  
 INVENTOR(S): Scott, Robert Andrew Donald  
 PATENT ASSIGNEE(S): Pfizer Inc., USA  
 SOURCE: PCT Int. Appl., 51 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND   | DATE     | APPLICATION NO.    | DATE            |
|---|--|----------|--------------------|-----------------|
| WO 9911260  | A1   | 19990311 | WO 1998-IB1230     | 19980811 <--    |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |  |          |                    |                 |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |  |          |                    |                 |
| AU 9884589  | A1   | 19990322 | AU 1998-84589      | 19980811 <--    |
| AU 740424   | B2   | 20011101 |                    |                 |
| EP 1009400  | A1   | 20000621 | EP 1998-935250     | 19980811 <--    |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO   |  |          |                    |                 |
| TR 200000563  | T2   | 20000721 | TR 2000-200000563  | 19980811 <--    |
| BR 9811556  | A  | 20000822 | BR 1998-11556      | 19980811 <--    |
| JP 2001514223   | T2   | 20010911 | JP 2000-508363     | 19980811 <--    |
| NZ 502280   | A  | 20021126 | NZ 1998-502280     | 19980811 <--    |
| CN 1473566  | A  | 20040211 | CN 2003-2003143092 | 19980811 <--    |
| CN 1473567  | A  | 20040211 | CN 2003-2003143093 | 19980811 <--    |
| AP 1191   | A  | 20030719 | AP 1998-1332       | 19980827 <--    |
| W: BW, GM, KE, MW, UG, ZM, ZW   |  |          |                    |                 |
| ZA 9807839  | A  | 20000228 | ZA 1998-7839       | 19980828 <--    |
| NO 2000000996   | A  | 20000427 | NO 2000-996        | 20000228 <--    |
| US 2002099046   | A1   | 20020725 | US 2001-45329      | 20011023 <--    |
| US 2003199492   | A1   | 20031023 | US 2003-442285     | 20030519 <--    |
| PRIORITY APPLN. INFO.:  |  |          |                    |                 |
|   |  |          | US 1997-57276P     | P 19970829 <--  |
|   |  |          | WO 1998-IB1230     | W 19980811 <--  |
|   |  |          | US 2000-513887     | B1 20000225 <-- |
|   |  |          | US 2001-45329      | B1 20011023 <-- |
| AB  | This invention relates to pharmaceutical combinations of atorvastatin or a pharmaceutically acceptable salt thereof and antihypertensive agents, kits containing such combinations and methods of using such combinations to treat subjects suffering from angina pectoris, atherosclerosis, combined hypertension and hyperlipidemia and to treat subjects presenting with symptoms of cardiac risk, including humans. This invention also relates to additive and synergistic combinations of atorvastatin or a pharmaceutically acceptable salt thereof and antihypertensive agents whereby those synergistic combinations are useful in treating subjects suffering from angina pectoris, atherosclerosis, combined hypertension and hyperlipidemia and those subjects presenting with symptoms of cardiac risk, including humans. |          |                    |                 |
| IT  | 116644-53-2, Mibefradil  |          |                    |                 |

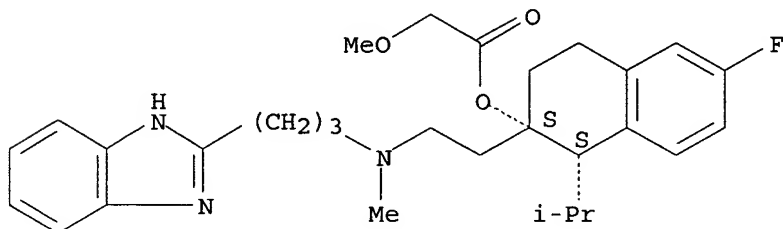
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination therapy comprising atorvastatin and antihypertensive agent)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 38 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:104627 HCAPLUS

DOCUMENT NUMBER: 130:205140

TITLE: Potential-dependent, T-type calcium channel inhibitors for treatment or prevention of pollakiuria or urinary incontinence

INVENTOR(S): Narita, Kazuhisa; Koga, Ichiro; Okada, Atsushi

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE         |
|------------------------|------|----------|-----------------|--------------|
| JP 11035483            | A2   | 19990209 | JP 1998-128463  | 19980512 <-- |
| PRIORITY APPLN. INFO.: |      |          | JP 1997-144503  | 19970520 <-- |

AB Potential-dependent, T-type calcium channel inhibitors e.g. [1S, 2S]-2-[2-[[3-[2-benzimidazolyl]propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-isopropyl-2-naphthylmethoxyacetate and 7-[4-[4,4'-difluorobenzohydryl]piperadino-1-methyl]-2-[[2-hydroxyethyl]amino]-4-isopropyl-2,4,6-cycloheptatrien-1-one for treatment or prevention of pollakiuria or urinary incontinence are claimed.

IT 220873-01-8

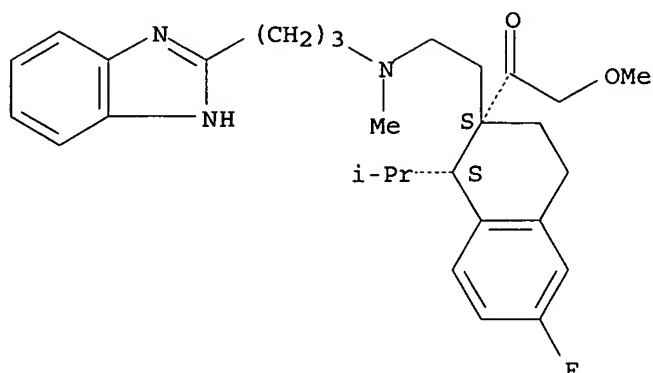
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(potential-dependent, T-type calcium channel inhibitors for treatment or prevention of pollakiuria or urinary incontinence)

RN 220873-01-8 HCAPLUS

CN Ethanone, 1-[(1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl]-2-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 39 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:721683 HCAPLUS

DOCUMENT NUMBER: 129:330729

TITLE: Preparation of mibefradil I.

INVENTOR(S): Fleming, Michael Paul; Harrington, Peter John

PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE            |
|---|------|----------|-----------------|-----------------|
| WO 9849149  | A1   | 19981105 | WO 1998-EP2416  | 19980423 <--    |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |                 |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG  |      |          |                 |                 |
| AU 9876477  | A1   | 19981124 | AU 1998-76477   | 19980423 <--    |
| PRIORITY APPLN. INFO.:  |      |          | US 1997-45151P  | P 19970430 <--  |
|   |      |          | WO 1998-EP2416  | W. 19980423 <-- |

OTHER SOURCE(S): CASREACT 129:330729

AB 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate was prepared by reducing N-[3-(1H-benzimidazol-2-yl)propyl]-2-(6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)-N-methylacetamide to give 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol and contacting the latter with MeOCH<sub>2</sub>CO<sub>2</sub>H or an activated derivative thereof.

IT 116644-53-2P, Mibefradil 116666-63-8P, Mibefradil dihydrochloride 213272-70-9P, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate 213272-71-0P, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate dihydrochloride

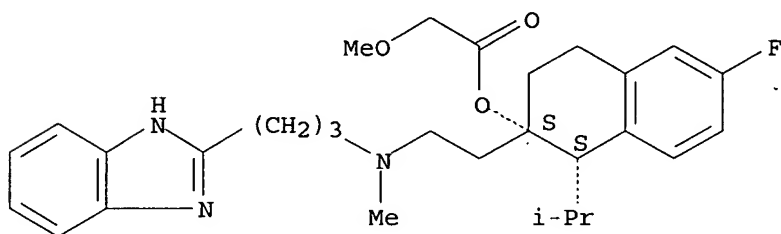
Searched by P. Ruppel

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
(preparation of mibefradil)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

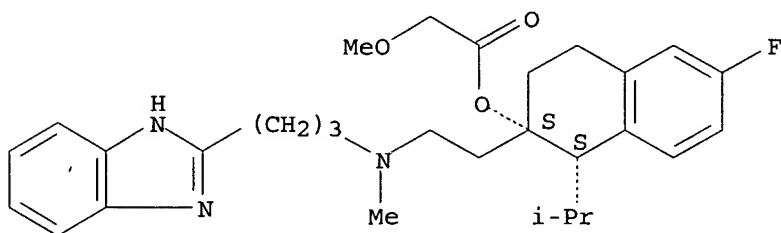
Absolute stereochemistry.



RN 116666-63-8 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

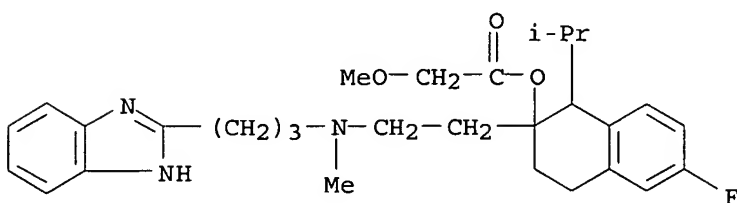
Absolute stereochemistry.



● 2 HCl

RN 213272-70-9 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)



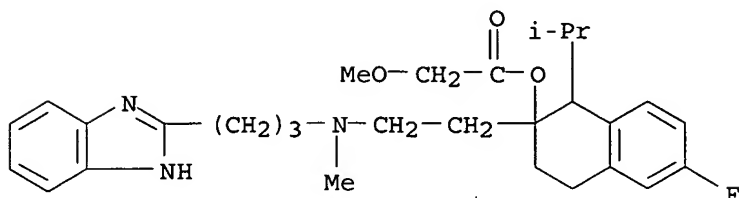
RN 213272-71-0 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-

Searched by P. Ruppel

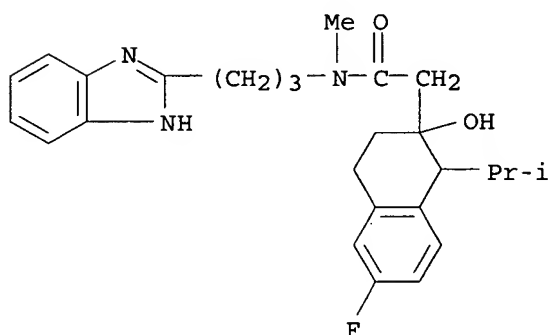


2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)



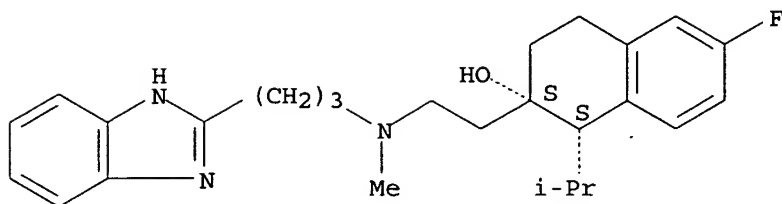
● 2 HCl

IT 213272-66-3, N-[3-(1H-Benzimidazol-2-yl)propyl]-2-(6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)-N-methylacetamide  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of mibefradil)  
 RN 213272-66-3 HCAPLUS  
 CN 2-Naphthaleneacetamide, N-[3-(1H-benzimidazol-2-yl)propyl]-6-fluoro-1,2,3,4-tetrahydro-2-hydroxy-N-methyl-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



IT 116666-60-5P, (1S,2S)-2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol 212967-75-4P, (1S,2S)-N-[3-(1H-Benzimidazol-2-yl)propyl]-2-(6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)-N-methylacetamide 213272-63-0P, (1S,2S)-2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol dioxalate 213272-69-6P, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of mibefradil)  
 RN 116666-60-5 HCAPLUS  
 CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

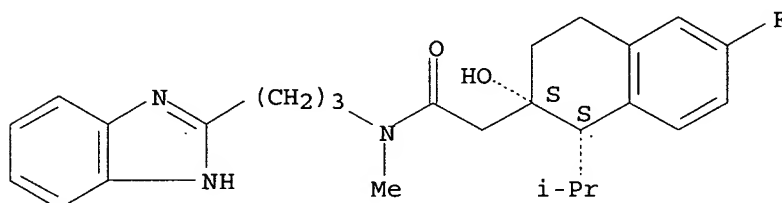
Absolute stereochemistry.



RN 212967-75-4 HCAPLUS

CN 2-Naphthaleneacetamide, N-[3-(1H-benzimidazol-2-yl)propyl]-6-fluoro-  
1,2,3,4-tetrahydro-2-hydroxy-N-methyl-1-(1-methylethyl)-, (1S,2S)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



RN 213272-63-0 HCAPLUS

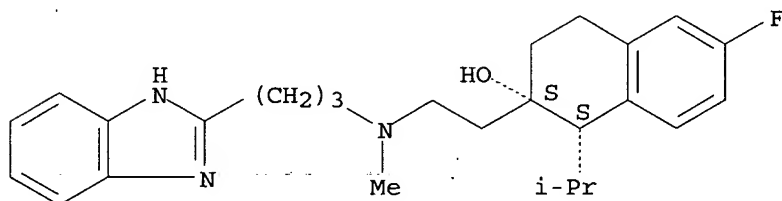
2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)-, ethanedioate (1:2) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 116666-60-5

CMF C26 H34 F N3 O

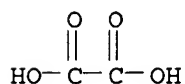
Absolute stereochemistry.



CM 2

CRN 144-62-7

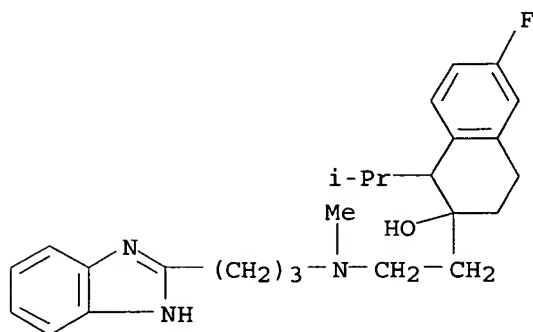
CMF C2 H2 O4



RN 213272-69-6 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-

fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 40 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1998:721682 HCAPLUS  
 DOCUMENT NUMBER: 129:343493  
 TITLE: Preparation of mibefradil II.  
 INVENTOR(S): Harrington, Peter John; Wong, Jim-wah  
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.  
 SOURCE: PCT Int. Appl., 22 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE           |
|---|------|----------|-----------------|----------------|
| WO 9849148  | A1   | 19981105 | WO 1998-EP2415  | 19980423 <--   |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |                |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG  |      |          |                 |                |
| AU 9879092  | A1   | 19981124 | AU 1998-79092   | 19980423 <--   |
| PRIORITY APPLN. INFO.:  |      |          | US 1997-46795P  | P 19970430 <-- |
|   |      |          | WO 1998-EP2415  | W 19980423 <-- |

OTHER SOURCE(S): CASREACT 129:343493

AB A process for preparation of 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate via contacting (6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)acetic acid or an activated derivative thereof with [3-(1H-benzimidazol-2-yl)propyl]methylamine to form N-[3-(1H-benzimidazol-2-yl)propyl]-2-(6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)-N-methylacetamide is claimed.

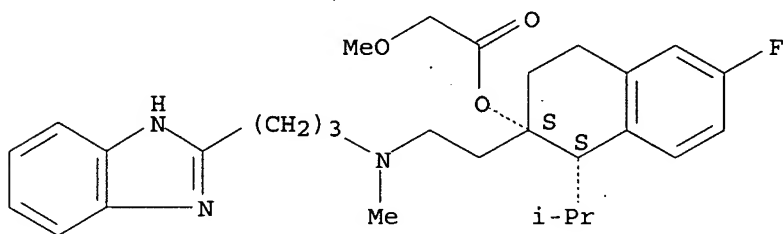
IT 116644-53-2P, Mibefradil 116666-63-8P, Mibefradil dihydrochloride 213272-70-9P, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methyl-amino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
(preparation of mibefradil)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

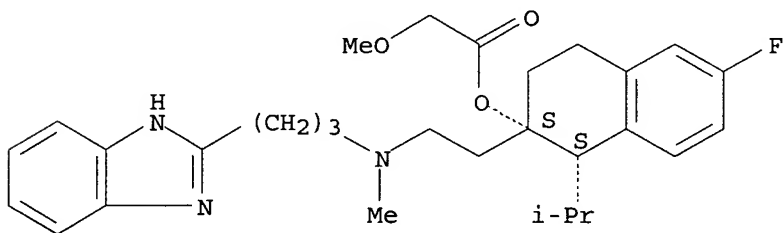
Absolute stereochemistry.



RN 116666-63-8 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

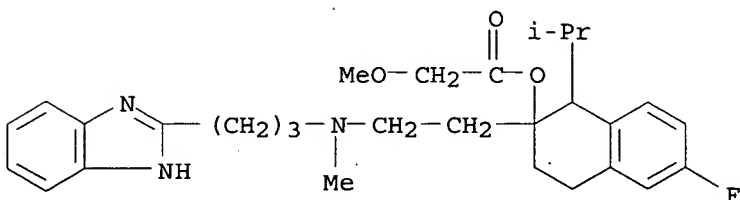
Absolute stereochemistry.



● 2 HCl

RN 213272-70-9 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)



IT 116666-60-5P, (1S,2S)-2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol 212967-75-4P 213272-63-0P

Searched by P. Ruppel

**213272-66-3P**, N-[3-(1H-Benzimidazol-2-yl)propyl]-2-(6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)-N-methylacetamide

**213272-69-6P**, 2-[2-{[3-(1H-Benzimidazol-2-yl)propyl]methylamino}ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol

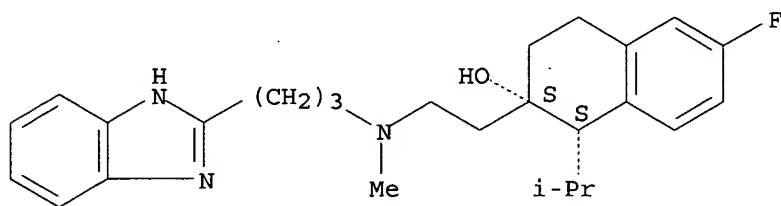
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of mibefradil)

RN 116666-60-5 HCAPLUS

CN 2-Naphthalenol, 2-[2-{[3-(1H-benzimidazol-2-yl)propyl]methylamino}ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

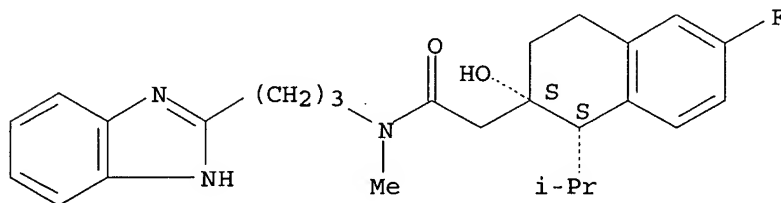
Absolute stereochemistry.



RN 212967-75-4 HCAPLUS

CN 2-Naphthaleneacetamide, N-[3-(1H-benzimidazol-2-yl)propyl]-6-fluoro-1,2,3,4-tetrahydro-2-hydroxy-N-methyl-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 213272-63-0 HCAPLUS

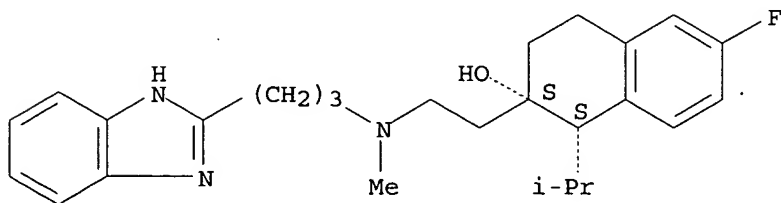
CN 2-Naphthalenol, 2-[2-{[3-(1H-benzimidazol-2-yl)propyl]methylamino}ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)-, ethanedioate (1:2) (salt) (9CI) (CA-INDEX NAME)

CM 1

CRN 116666-60-5

CMF C26 H34 F N3 O

Absolute stereochemistry.

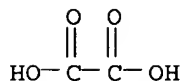


Searched by P. Ruppel

CM 2

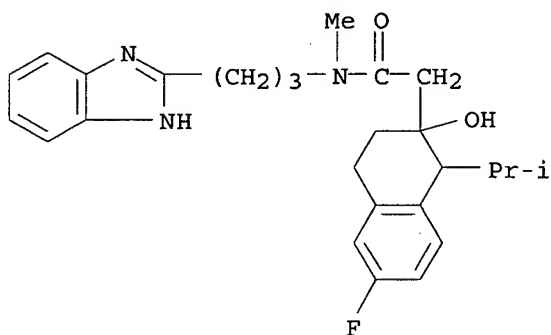
CRN 144-62-7

CMF C2 H2 O4



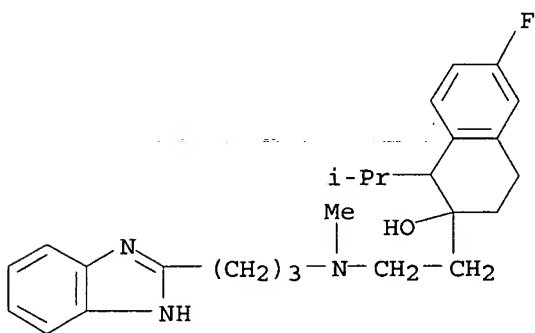
RN 213272-66-3 HCAPLUS

CN 2-Naphthaleneacetamide, N-[3-(1H-benzimidazol-2-yl)propyl]-6-fluoro-1,2,3,4-tetrahydro-2-hydroxy-N-methyl-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 213272-69-6 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 41 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:721681 HCAPLUS

DOCUMENT NUMBER: 129:343492

TITLE: Preparation of mibefradil III.

INVENTOR(S): Harrington, Peter John; Wong, Jim-wah

Searched by P. Ruppel

PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.  
 SOURCE: PCT Int. Appl., 19 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE           |
|---|------|----------|-----------------|----------------|
| WO 9849147  | A1   | 19981105 | WO 1998-EP2406  | 19980423 <--   |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |                |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG  |      |          |                 |                |
| AU 9876473  | A1   | 19981124 | AU 1998-76473   | 19980423 <--   |
| PRIORITY APPLN. INFO.:  |      |          | US 1997-45150P  | P 19970430 <-- |
|   |      |          | WO 1998-EP2406  | W 19980423 <-- |

OTHER SOURCE(S): CASREACT 129:343492

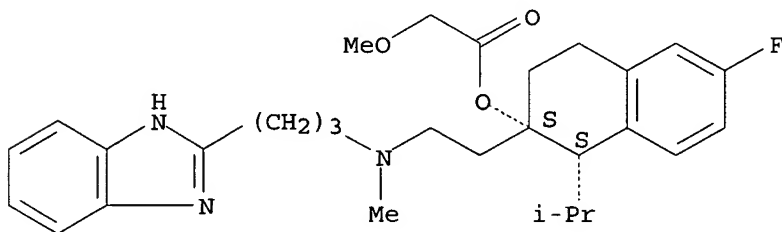
AB 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate was prepared by contacting [3-(1H-benzimidazol-2-yl)propyl]methylamine with (6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)acetonitrile in the presence of H<sub>2</sub> and a hydrogenation catalyst, followed by contacting the resulting 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol with MeOCH<sub>2</sub>CO<sub>2</sub>H or an activated derivative thereof.

IT 116644-53-2P, (1S,2S)-2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate 116666-63-8P, Mibefradil dihydrochloride 213272-70-9P, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of mibefradil)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

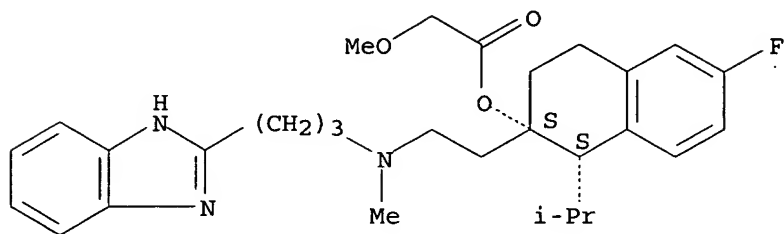


RN 116666-63-8 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-

2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

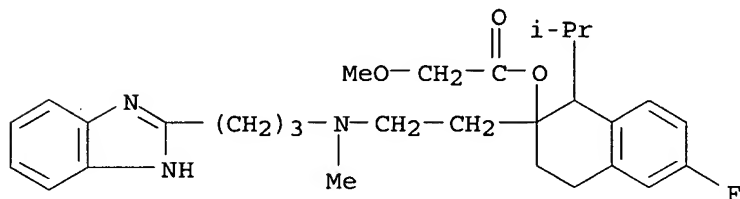
Absolute stereochemistry.



● 2 HCl

RN 213272-70-9 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester. (9CI) (CA INDEX NAME)

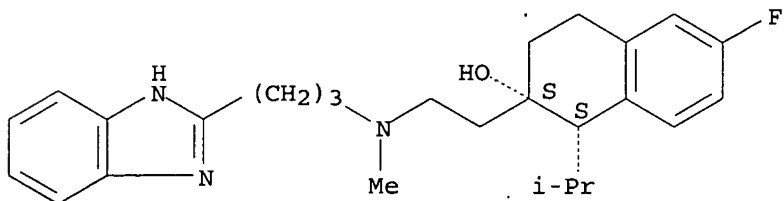


IT 116666-60-5P, (1S,2S)-2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol 213272-63-0P 213272-69-6P,  
2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of mibefradil).

RN 116666-60-5 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 213272-63-0 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-

Searched by P. Ruppel



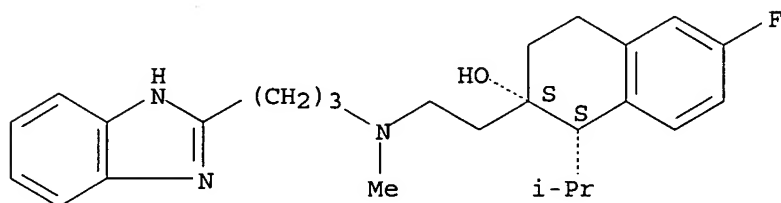
fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)-, ethanedioate (1:2)  
(salt) (9CI) (CA INDEX NAME)

CM 1

CRN 116666-60-5

CMF C26 H34 F N3 O

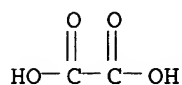
Absolute stereochemistry.



CM 2

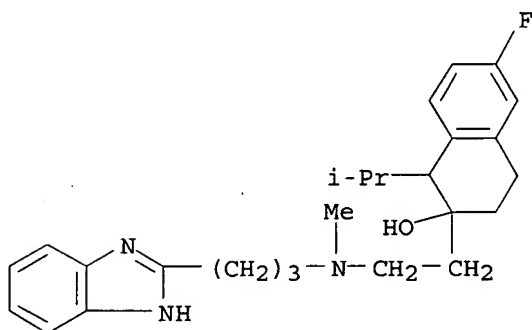
CRN 144-62-7

CMF C2 H2 O4



RN 213272-69-6 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 42 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:618399 HCAPLUS

DOCUMENT NUMBER: 129:245150

TITLE: Improved preparation of mibefradil via an acetonitrile anion

INVENTOR(S): Wong, Jim-wah; Harrington, Peter J.

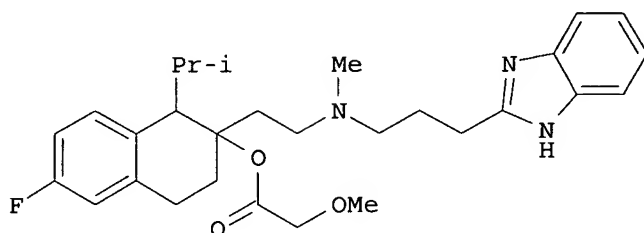
PATENT ASSIGNEE(S): Roche Colorado Corp., USA

Searched by P. Ruppel

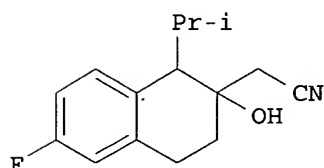
SOURCE: U.S., 6 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND     | DATE       | APPLICATION NO. | DATE         |
|------------------------|----------|------------|-----------------|--------------|
| US 5811557             | A        | 19980922   | US 1998-60401   | 19980414 <-- |
| PRIORITY APPLN. INFO.: |          |            | US 1998-60401   | 19980414 <-- |
| OTHER SOURCE(S):       | CASREACT | 129:245150 |                 |              |

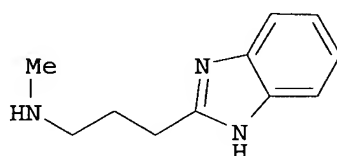
GI



I



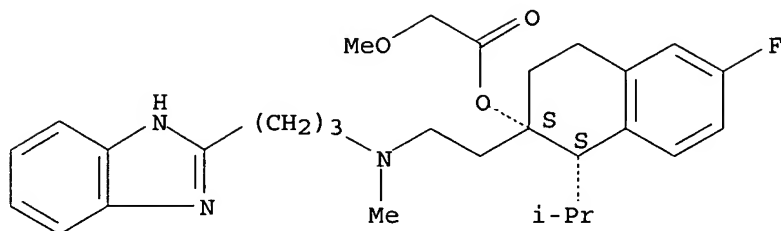
II



III

- AB A method of preparing 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate (I) comprises contacting 6-fluoro-1-isopropyl-3,4-dihydro-1H-naphthalen-2-one with the anion of acetonitrile in an aprotic polar solvent, contacting the thus-formed (6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)acetonitrile (II) with [3-(1H-benzimidazol-2-yl)propyl]methylamine (III) in the presence of hydrogen and a hydrogenation catalyst, and finally esterifying the obtained 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol with methoxyacetic acid or an activated derivative of it. The invention is particularly applicable to the preparation of the antihypertensive mibefradil, namely (1S,2S)-I, and its di-HCl salt. The intermediate nitrile II is a new compound
- IT 116644-53-2P, Mibefradil 116666-63-8P, Mibefradil dihydrochloride 213272-70-9P, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
 (improved preparation of mibefradil via an acetonitrile anion)
- RN 116644-53-2 HCAPLUS
- CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

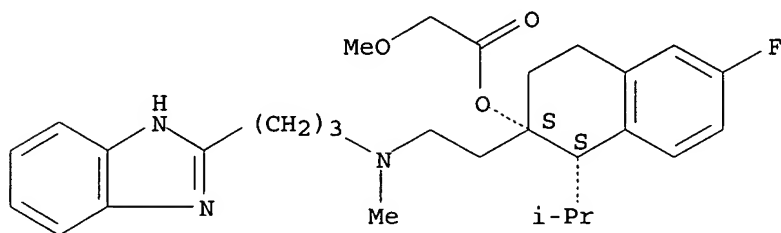
Absolute stereochemistry.



RN 116666-63-8 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

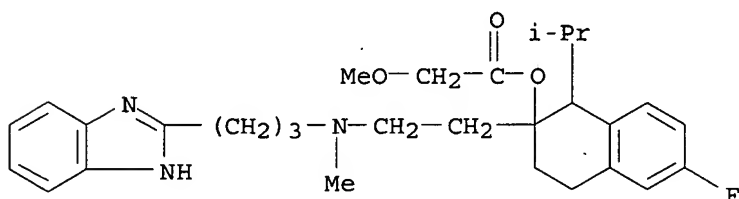
Absolute stereochemistry.



● 2 HCl

RN 213272-70-9 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)



IT 116666-60-5P, (1S,2S)-2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol 213272-63-0P, (1S,2S)-2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol dioxalate 213272-69-6P, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol

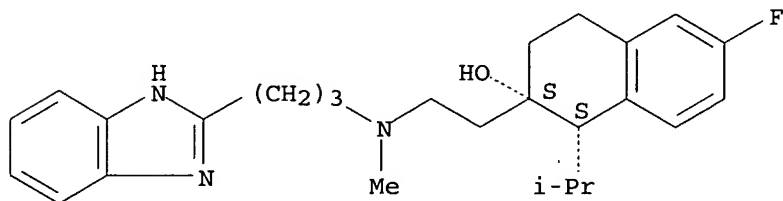
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; improved preparation of mibefradil via an acetonitrile anion)

RN 116666-60-5 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 213272-63-0 HCAPLUS

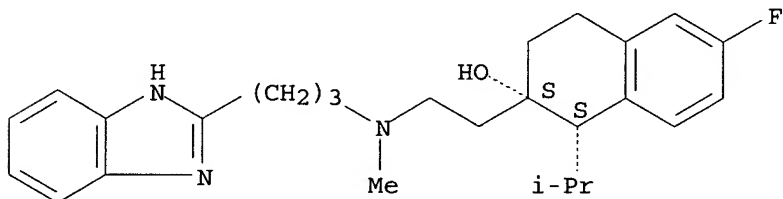
CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)-, ethanedioate (1:2) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 116666-60-5

CMF C26 H34 F N3 O

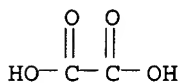
Absolute stereochemistry.



CM 2

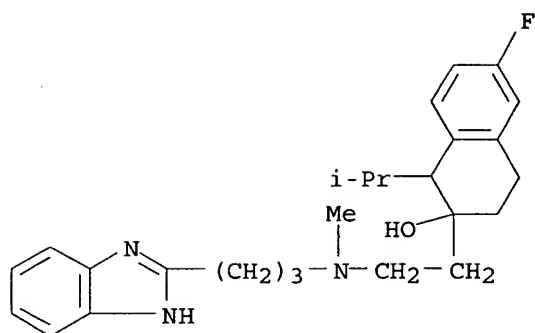
CRN 144-62-7

CMF C2 H2 O4



RN 213272-69-6 HCAPLUS

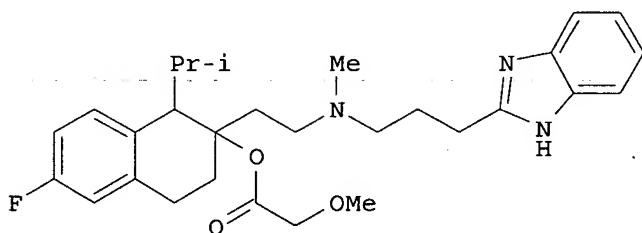
CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



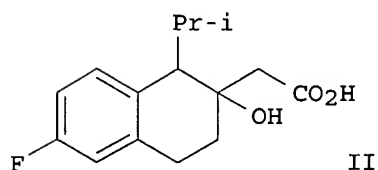
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 43 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1998:618398 HCAPLUS  
 DOCUMENT NUMBER: 129:245149  
 TITLE: Improved preparation of mibefradil via a naphthalenylacetic acid  
 INVENTOR(S): Harrington, Peter J.; Wong, Jim-wah  
 PATENT ASSIGNEE(S): Roche Colorado Corp., USA  
 SOURCE: U.S., 7 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

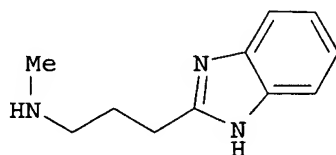
| PATENT NO.             | KIND                | DATE     | APPLICATION NO. | DATE         |
|------------------------|---------------------|----------|-----------------|--------------|
| US 5811556             | A                   | 19980922 | US 1998-60168   | 19980414 <-- |
| PRIORITY APPLN. INFO.: |                     |          | US 1998-60168   | 19980414 <-- |
| OTHER SOURCE(S):       | CASREACT 129:245149 |          |                 |              |
| GI                     |                     |          |                 |              |



I



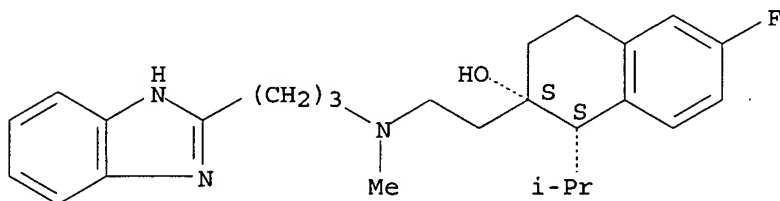
II



III

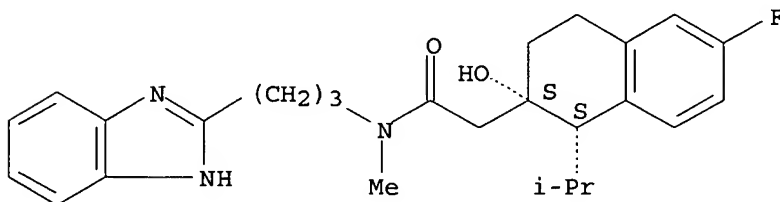
- AB A method of preparing 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate (I) comprises contacting (6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)acetic acid (II) or an activated derivative with [3-(1H-benzimidazol-2-yl)propyl]methylamine(III), reducing the formed amide function to a tertiary amine, and esterifying the obtained hydroxy amine with methoxyacetic acid or an activated derivative of it. The invention is particularly applicable to the preparation of the antihypertensive mibefradil, i.e., (1S,2S)-I, and its di-HCl salt. The intermediate amide, namely N-[3-(1H-benzimidazol-2-yl)propyl]-2-(6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)-N-methylacetamide, is a new compound
- IT **116666-60-5P**, (1S,2S)-2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol **212967-75-4P**, (1S,2S)-N-[3-(1H-Benzimidazol-2-yl)propyl]-2-(6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)-N-methylacetamide **213272-63-0P**, (1S,2S)-2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol dioxalate **213272-66-3P**, N-[3-(1H-Benzimidazol-2-yl)propyl]-2-(6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)-N-methylacetamide **213272-69-6P**, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol
- RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of mibefradil via a naphthalenylacetic acid)
- RN **116666-60-5** HCAPLUS
- CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- RN **212967-75-4** HCAPLUS
- CN 2-Naphthaleneacetamide, N-[3-(1H-benzimidazol-2-yl)propyl]-6-fluoro-1,2,3,4-tetrahydro-2-hydroxy-N-methyl-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- RN **213272-63-0** HCAPLUS

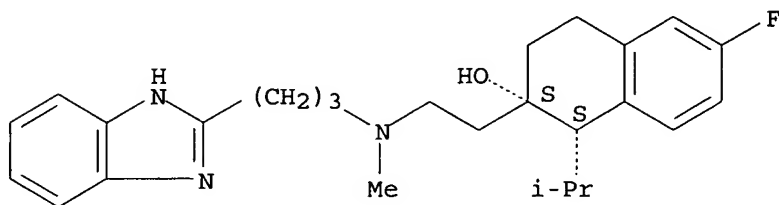
CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)-, ethanedioate (1:2) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 116666-60-5

CMF C26 H34 F N3 O

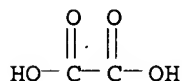
Absolute stereochemistry.



CM 2

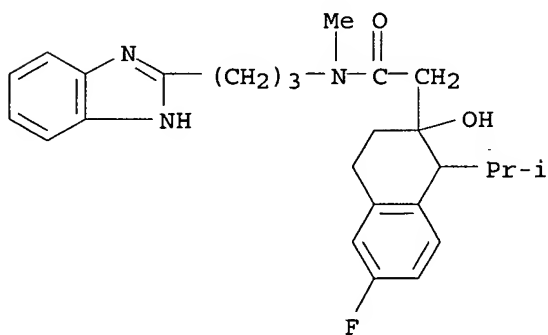
CRN 144-62-7

CMF C2 H2 O4



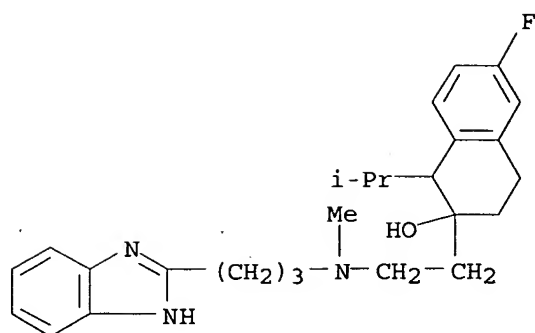
RN 213272-66-3 HCAPLUS

CN 2-Naphthaleneacetamide, N-[3-(1H-benzimidazol-2-yl)propyl]-6-fluoro-1,2,3,4-tetrahydro-2-hydroxy-N-methyl-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 213272-69-6 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



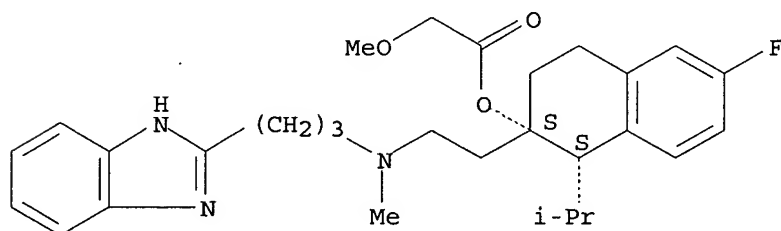
IT 116644-53-2P, Mibefradil 116666-63-8P, Mibefradil dihydrochloride 213272-70-9P, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate 213272-71-0P, 2-[2-[[3-(1H-Benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate dihydrochloride  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of mibefradil via a naphthalenylacetic acid)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

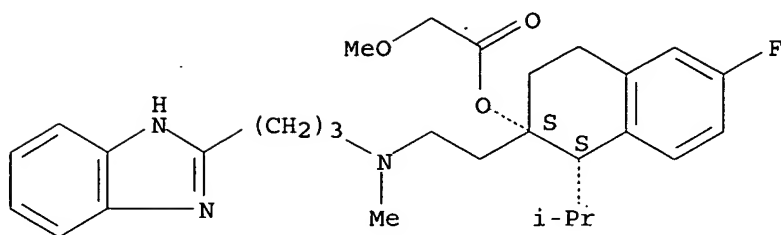


RN 116666-63-8 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

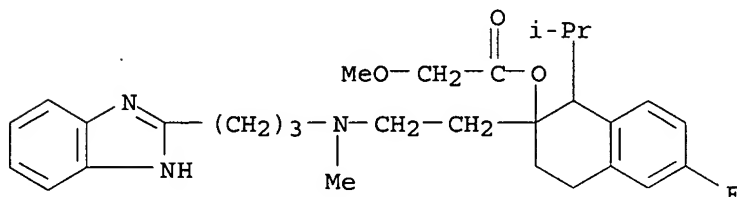




● 2 HCl

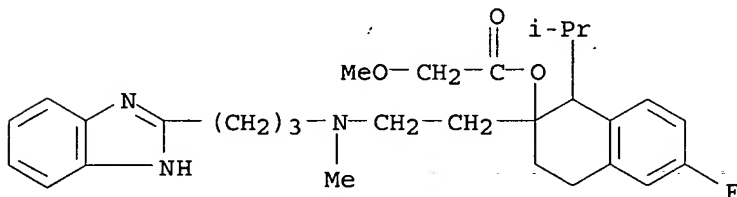
RN 213272-70-9 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)



RN 213272-71-0 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 44 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:604714 HCAPLUS

DOCUMENT NUMBER: 129:230726

TITLE: Preparation of mibefradil via an acetamide anion

INVENTOR(S): Harrington, Peter J.; Fleming, Michael P.

PATENT ASSIGNEE(S): Roche Colorado Corporation, USA

SOURCE: U.S., 7 pp.

Searched by P. Ruppel

DOCUMENT TYPE: **Patent**  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE         |
|------------------------|------|----------|-----------------|--------------|
| US 5808088             | A    | 19980915 | US 1998-60151   | 19980414 <-- |
| US 5892055             | A    | 19990406 | US 1998-106058  | 19980626 <-- |
| PRIORITY APPLN. INFO.: |      |          | US 1998-60151   | 19980414 <-- |

OTHER SOURCE(S): CASREACT 129:230726

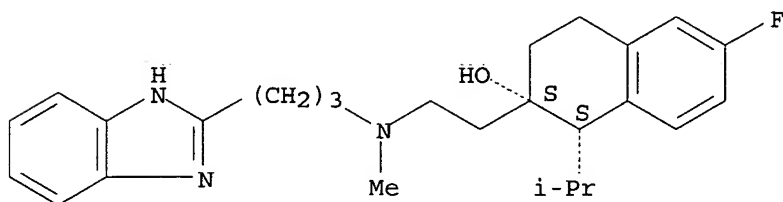
AB A method of preparing 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate comprises contacting 6-fluoro-1-isopropyl-3,4-dihydro-1H-naphthalen-2-one with the dianion of N-[3-(1H-benzimidazol-2-yl)propyl]-N-methylacetamide to form N-[3-(1H-benzimidazol-2-yl)propyl]-2-(6-fluoro-2-hydroxy-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl)-N-methylacetamide, reducing this to 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol, and treating the 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol with methoxyacetic acid or an activated derivative of methoxyacetic acid. The invention is particularly applicable to the preparation of mibefradil, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-yl methoxyacetate, and its dihydrochloride salt. N-[3-(1H-Benzimidazol-2-yl)propyl]-N-methylacetamide, and the acetic acid solvate of 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1-isopropyl-1,2,3,4-tetrahydronaphthalen-2-ol dioxalate, are new.

IT **116666-60-5P 212967-75-4P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of mibefradil via an acetamide anion)

RN 116666-60-5 HCAPLUS

CN 2-Naphthalenol, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

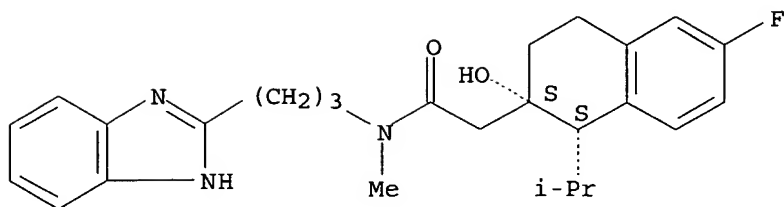
Absolute stereochemistry.



RN 212967-75-4 HCAPLUS

CN 2-Naphthaleneacetamide, N-[3-(1H-benzimidazol-2-yl)propyl]-6-fluoro-1,2,3,4-tetrahydro-2-hydroxy-N-methyl-1-(1-methylethyl)-, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



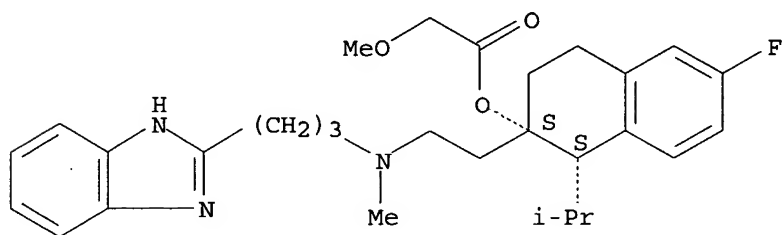
IT 116644-53-2P 116666-63-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of mibefradil via an acetamide anion)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

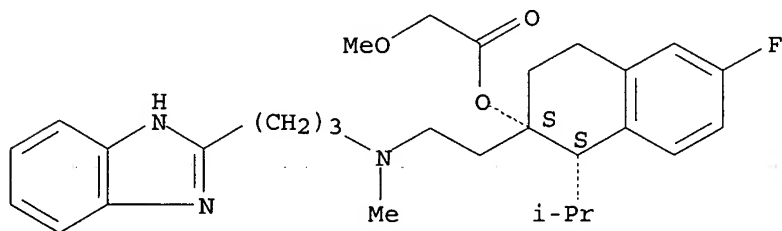
Absolute stereochemistry.



RN 116666-63-8 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 2 HCl

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 45 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:555763 HCAPLUS

DOCUMENT NUMBER: 127:161594

TITLE: Dehydrative process for the preparation of aromatic alpha,beta-unsaturated carboxylic acids

Searched by P. Ruppel

INVENTOR(S): Foricher, Joseph; Schmid, Rudolf  
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE           |
|---|------|----------|-----------------|----------------|
| EP 787711   | A2   | 19970806 | EP 1997-100843  | 19970121 <--   |
| EP 787711   | A3   | 19980107 |                 |                |
| EP 787711   | B1   | 20000426 |                 |                |
| R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE |      |          |                 |                |
| US 5910606  | A    | 19990608 | US 1997-780952  | 19970110 <--   |
| JP 09208516   | A2   | 19970812 | JP 1997-5425    | 19970116 <--   |
| CA 2195617  | AA   | 19970801 | CA 1997-2195617 | 19970121 <--   |
| AT 192135   | E    | 20000515 | AT 1997-100843  | 19970121 <--   |
| ES 2146041  | T3   | 20000716 | ES 1997-100843  | 19970121 <--   |
| PT 787711   | T    | 20000929 | PT 1997-100843  | 19970121 <--   |
| CN 1162589  | A    | 19971022 | CN 1997-102090  | 19970128 <--   |
| CN 1069629  | B    | 20010815 |                 |                |
| BR 9700814  | A    | 19980707 | BR 1997-814     | 19970130 <--   |
| GR 3033816  | T3   | 20001031 | GR 2000-401516  | 20000629 <--   |
| PRIORITY APPLN. INFO.:  |      |          | CH 1996-247     | A 19960131 <-- |

OTHER SOURCE(S): CASREACT 127:161594; MARPAT 127:161594

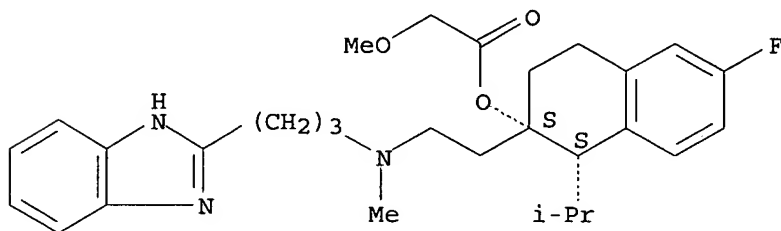
AB The title compds. R<sub>1</sub>2C:C(A)CO<sub>2</sub>H [A = (un)substituted aryl; R<sub>1</sub> = C<sub>1</sub>-5 alkyl] are prepared in high yield and selectivity by the dehydration of hydroxycarboxylic acids HO(R<sub>1</sub>)<sub>2</sub>CCH(A)CO<sub>2</sub>H in the presence of a strong acid at 0-40°. Thus, 2-(4-fluorophenyl)-3-hydroxy-3-methylbutyric acid was dehydrated with concentrated H<sub>2</sub>SO<sub>4</sub> at 20°, producing 99.8%-pure 2-(4-fluorophenyl)-3-methylcrotonic acid (m.p. 124-126°) in 95.7% yield.

IT 116644-53-2DP, Mibefradil, intermediates  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (dehydrative process for the preparation of aromatic alpha,beta-unsatd. carboxylic acids)

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 46 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:144163 HCAPLUS

DOCUMENT NUMBER: 120:144163

TITLE: Topical ophthalmic compositions comprising a

combination of calcium antagonists with known  
antiglaucoma agents  
INVENTOR(S): Desantis, Louis, Jr.  
PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA  
SOURCE: PCT Int. Appl., 20 PP.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE           |
|---|------|----------|-----------------|----------------|
| WO 9323082  | A1   | 19931125 | WO 1993-US4505  | 19930512 <--   |
| W: AU, CA, JP   |      |          |                 |                |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE    |      |          |                 |                |
| AU 9342467  | A1   | 19931213 | AU 1993-42467   | 19930512 <--   |
| EP 639986   | A1   | 19950301 | EP 1993-911276  | 19930512 <--   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE |      |          |                 |                |
| JP 07508030   | T2   | 19950907 | JP 1993-503718  | 19930512 <--   |
| PRIORITY APPLN. INFO.:  |      |          | US 1992-882328  | A 19920513 <-- |
|   |      |          | WO 1993-US4505  | A 19930512 <-- |

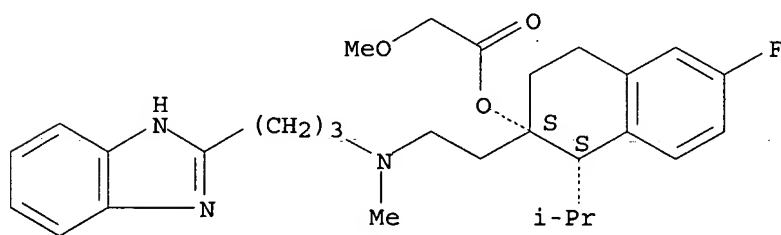
AB Calcium antagonists and compds. which lower intraocular pressure are combined in ophthalmic compns. to treat glaucoma. The calcium antagonists prevent or reduce the loss of visual field, while the intraocular pressure-lowering compds. maintain the intraocular pressure at normal levels.

IT 116666-63-8  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(calcium antagonist, ophthalmic compns. containing intraocular pressure-lowering agents and, for glaucoma treatment)

RN 116666-63-8 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



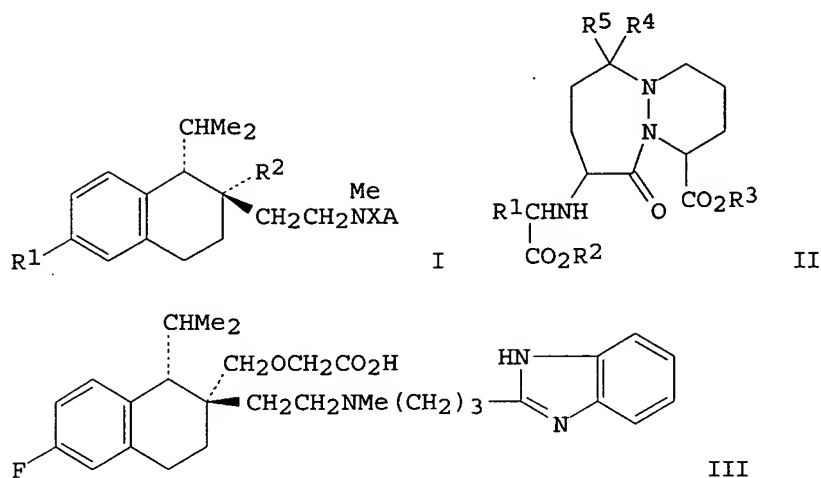
● 2 HCl

L26 ANSWER 47 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1993:219851 HCAPLUS  
DOCUMENT NUMBER: 118:219851  
TITLE: Antihypertensive combination pharmaceuticals  
INVENTOR(S): Clozel, Jean Paul; Mueller, Rita; Osterrieder, Wolfgang

Searched by P. Ruppel

PATENT ASSIGNEE(S): Hoffmann-La Roche, F., A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.   | DATE            |
|---|------|----------|-------------------|-----------------|
| EP 524512   | A2   | 19930127 | EP 1992-111847    | 19920711 <--    |
| EP 524512   | A3   | 19930901 |                   |                 |
| EP 524512   | B1   | 20040303 |                   |                 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE |      |          |                   |                 |
| AT 260661   | E    | 20040315 | AT 1992-111847    | 19920711 <--    |
| PT 524512   | T    | 20040730 | PT 1992-111847    | 19920711 <--    |
| ES 2215160  | T3   | 20041001 | ES 1992-111847    | 19920711 <--    |
| CA 2074039  | AA   | 19930124 | CA 1992-2074039   | 19920716 <--    |
| CA 2074039  | C    | 20041102 |                   |                 |
| ZA 9205322  | A    | 19930331 | ZA 1992-5322      | 19920716 <--    |
| IL 102541   | A1   | 19951208 | IL 1992-102541    | 19920717 <--    |
| AU 9220416  | A1   | 19930128 | AU 1992-20416     | 19920720 <--    |
| AU 656207   | B2   | 19950127 |                   |                 |
| HU 62792  | A2   | 19930628 | HU 1992-2367      | 19920720 <--    |
| HU 214029   | B    | 19971229 |                   |                 |
| RU 2084225  | C1   | 19970720 | RU 1992-5052378   | 19920720 <--    |
| RO 110905   | B3   | 19960530 | RO 1992-990       | 19920721 <--    |
| CZ 281691   | B6   | 19961211 | CZ 1992-2270      | 19920721 <--    |
| SK 278918   | B6   | 19980408 | SK 1992-2270      | 19920721 <--    |
| NO 9202903  | A    | 19930125 | NO 1992-2903      | 19920722 <--    |
| CN 1068737  | A    | 19930210 | CN 1992-108668    | 19920722 <--    |
| CN 1040505  | B    | 19981104 |                   |                 |
| BR 9202830  | A    | 19930323 | BR 1992-2830      | 19920723 <--    |
| JP 05194217   | A2   | 19930803 | JP 1992-216629    | 19920723 <--    |
| JP 06080009   | B4   | 19941012 |                   |                 |
| HR 930953   | B1   | 20030630 | HR 1993-930953    | 19930607 <--    |
| US 5620975  | A    | 19970415 | US 1994-333171    | 19941102 <--    |
| PRIORITY APPLN. INFO.:  |      |          | CH 1991-2191      | A 19910723 <--  |
|   |      |          | US 1992-909357    | B1 19920706 <-- |
|   |      |          | US 1994-210095    | B1 19940317 <-- |
| OTHER SOURCE(S):  |      |          | MARPAT 118:219851 |                 |
| GI  |      |          |                   |                 |



AB Antihypertensive pharmaceuticals consist of a mixture of tetrahydronaphthalene derivative (I, R1 = e.g., halo, R2 = lower alkoxy or alkylcarbonyloxy, X = C2-8 alkylene and A = N-alkyl substituted benzimidazolyl) and a pyridazodiazepine (II, R1 = C1-6 aralkyl R2, R3 = H or C1-6 alkyl, R4 and R5 = H or R4R5 = O). By using the combination, individual drug doses can be reduced, undesired side effects are reduced, and both compds. have a similar long biol. half life of 10-12 h during treatment in human. Thus, a tablet core composition was prepared starting from III 29.07, clizapril 1.25, anhydrous lactose 70.18, corn starch 30.00, poly(vinylpyrrolidone) 5.00, talc 5.00, and Na stearyl fumarate 1.50 mg. A coating composition for tablets contained hydroxypropyl Me cellulose 4.00, polyethylene glycol 6000 1.00, TiO2 1.60, and talc 1.40 mg. The tablet core was coated with the coating composition. The effectiveness of the combination drugs in decreasing hypertension was demonstrated.

IT 147455-39-8 147471-62-3

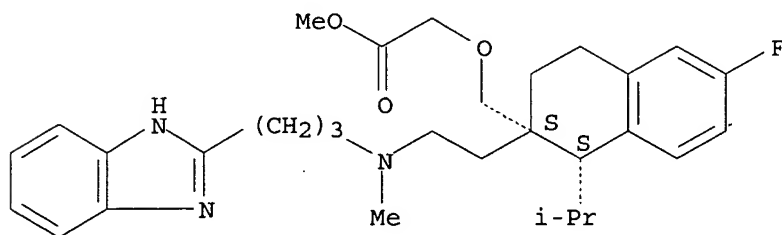
RL: BIOL (Biological study)

(antihypertensive combination pharmaceuticals containing pyridazodiazepine derivative and)

RN 147455-39-8 HCAPLUS

CN Acetic acid, [[2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl]methoxy]-, methyl ester, (1S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

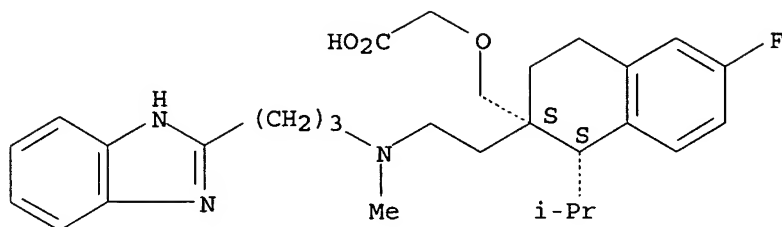


RN 147471-62-3 HCAPLUS

CN Acetic acid, [[2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl]methoxy]-, dihydrochloride, (1S-cis)- (9CI) (CA INDEX NAME)

Searched by P. Ruppel

Absolute stereochemistry.



● 2 HCl

L26 ANSWER 48 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1988:549535 HCAPLUS  
 DOCUMENT NUMBER: 109:149535  
 TITLE: Preparation of [[(heterocyclylalkyl)amino]ethyl]tetrahydrophthalenes as cardiovascular agents  
 INVENTOR(S): Branca, Quirico; Jaunin, Roland; Maerki, Hans Peter; Marti, Fraenzi; Ramuz, Henri  
 PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 37 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE         |
|---|------|----------|-----------------|--------------|
| EP 268148   | A1   | 19880525 | EP 1987-116251  | 19871104 <-- |
| EP 268148   | B1   | 19911211 |                 |              |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE |      |          |                 |              |
| DK 8705599  | A    | 19880515 | DK 1987-5599    | 19871026 <-- |
| DK 171349   | B1   | 19960916 |                 |              |
| CA 1319144  | A1   | 19930615 | CA 1987-550190  | 19871026 <-- |
| CS 264350   | B2   | 19890712 | CS 1987-7874    | 19871103 <-- |
| AT 70267  | E    | 19911215 | AT 1987-116251  | 19871104 <-- |
| ES 2040234  | T3   | 19931016 | ES 1987-116251  | 19871104 <-- |
| ZA 8708362  | A    | 19880727 | ZA 1987-8362    | 19871106 <-- |
| AU 8780909  | A1   | 19880519 | AU 1987-80909   | 19871109 <-- |
| AU 600769   | B2   | 19900823 |                 |              |
| IL 84407  | A1   | 19910916 | IL 1987-84407   | 19871109 <-- |
| JP 63139171   | A2   | 19880610 | JP 1987-282287  | 19871110 <-- |
| JP 2504490  | B2   | 19960605 |                 |              |
| US 4808605  | A    | 19890228 | US 1987-119114  | 19871110 <-- |
| HU 60251  | A2   | 19920828 | HU 1987-5011    | 19871111 <-- |
| HU 215915   | B    | 19990329 |                 |              |
| FI 8705024  | A    | 19880515 | FI 1987-5024    | 19871113 <-- |
| FI 94414  | B    | 19950531 |                 |              |
| FI 94414  | C    | 19950911 |                 |              |
| NO 8704757  | A    | 19880516 | NO 1987-4757    | 19871113 <-- |
| NO 172237   | B    | 19930315 |                 |              |
| NO 172237   | C    | 19930623 |                 |              |

Searched by P. Ruppel

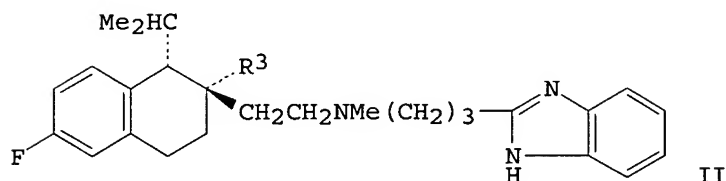
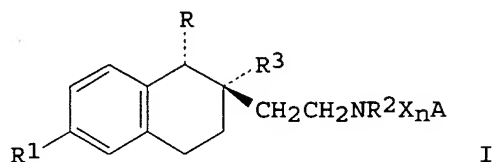


CN 87107875  
CN 1028991

|   |          |
|---|----------|
| A | 19880525 |
| B | 19950621 |

CN 1987-107875  
CH 1986-4565  
EP 1987-116251

```
19871113 <--
19861114 <--
19871104 <--
```



AB The title compds. [I; A = substituted 2-(imidazol-2-yl)ethyl, (un)substituted benzimidazolyl, benzothiazolyl, etc.; R, R<sub>2</sub> = alkyl; R<sub>1</sub> = halo; R<sub>3</sub> = OH, alkoxy, alkanoyloxy, alkoxyalkanoyloxy, etc.; X = C<sub>1</sub>-18 alkylene, optionally interrupted by 1,4-phenylene or -cyclohexylene; n = 0, 1] were prepared PhCH<sub>2</sub>O<sub>2</sub>CNMe(CH<sub>2</sub>)<sub>3</sub>CONHC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>-2 (preparation given) was refluxed 2 h in PhMe containing 4-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H and the product hydrogenolized over Pd/C to give 2-[3-(methylamino)propyl]benzimidazole which was heated 30 min at 120° in (Me<sub>2</sub>CH)<sub>2</sub>NEt with 2-(6-fluoro-1,2,3,4-tetrahydro-2'-hydroxy-1 $\alpha$ -isopropyl-2 $\beta$ -naphthyl)ethyl p-toluenesulfonate to give title compound II (R<sub>3</sub> = OH). The latter was stirred overnight with MeOCH<sub>2</sub>COCl in CHCl<sub>3</sub> containing (Me<sub>2</sub>CH)<sub>2</sub>NEt to give II (R<sub>3</sub> = MeOCH<sub>2</sub>CO<sub>2</sub>) (III) which, at 0.3 mg/kg i.v., gave 25% and 86% increase in heart contractility and coronary blood flow, resp., in anesthetized dogs. Tablets were prepared each containing III 75, lactose 135, starch 70, Povidone K 30 15, talc 3, and Mg stearate 2 mg.

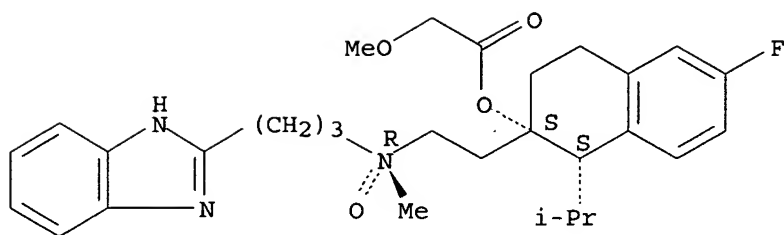
IT      116643-65-3P   116643-66-4P   116644-10-1P  
          116644-16-7P   116644-17-8P   116644-18-9P  
          116644-23-6P   116644-53-2P   116666-60-5P  
          116666-63-8P   116666-82-1P   116666-89-8P  
          116666-90-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as cardiovascular agent)

RN 116643-65-3 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methyloxidoamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, [1S-[1 $\alpha$ ,2 $\alpha$ ,2(S\*)]]- (9CI)  
(CA INDEX NAME)

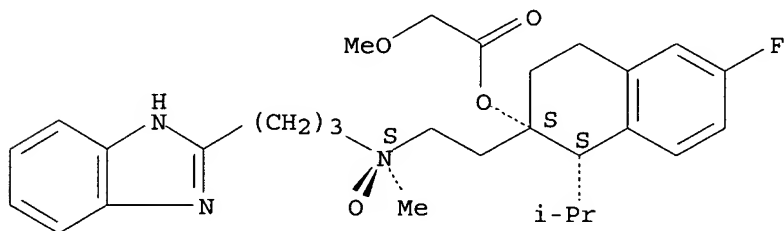
Absolute stereochemistry.



RN 116643-66-4 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methyloxidoamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, [1S-[1α,2α,2(R\*)]]- (9CI)  
(CA INDEX NAME)

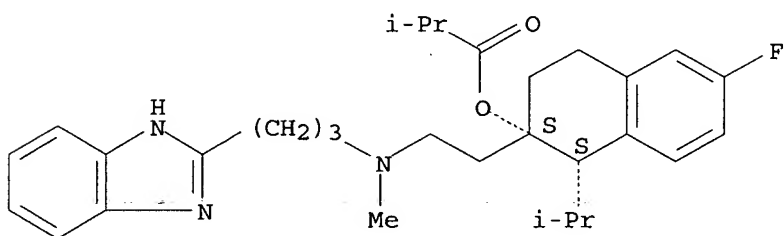
Absolute stereochemistry.



RN 116644-10-1 HCAPLUS

CN Propanoic acid, 2-methyl-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

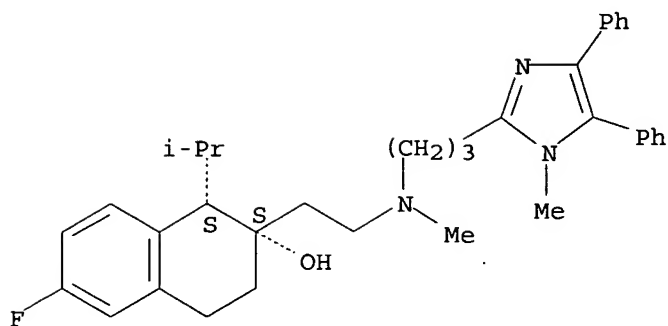


● 2 HCl

RN 116644-16-7 HCAPLUS

CN 2-Naphthalenol, 6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-[2-[methyl[3-(1-methyl-4,5-diphenyl-1H-imidazol-2-yl)propyl]amino]ethyl]-, (1S-cis)- (9CI) (CA INDEX NAME)

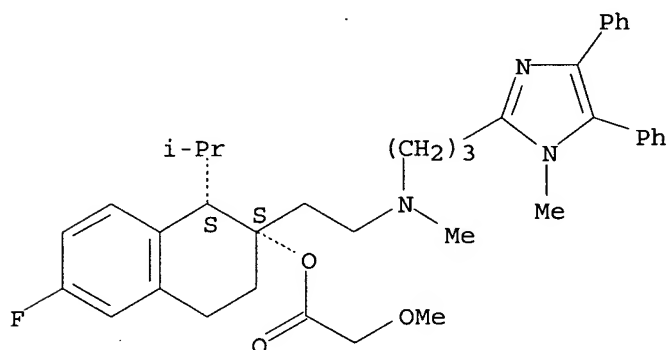
Absolute stereochemistry.



RN 116644-17-8 HCAPLUS

CN Acetic acid, methoxy-, 6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-[2-[methyl[3-(1-methyl-4,5-diphenyl-1H-imidazol-2-yl)propyl]amino]ethyl]-2-naphthalenyl ester, (1S-cis)- (9CI) (CA INDEX NAME)

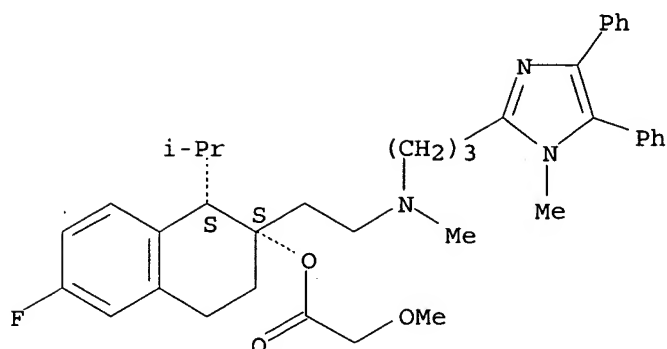
Absolute stereochemistry.



RN 116644-18-9 HCAPLUS

CN Acetic acid, methoxy-, 6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-[2-[methyl[3-(1-methyl-4,5-diphenyl-1H-imidazol-2-yl)propyl]amino]ethyl]-2-naphthalenyl ester, dihydrochloride, (1S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

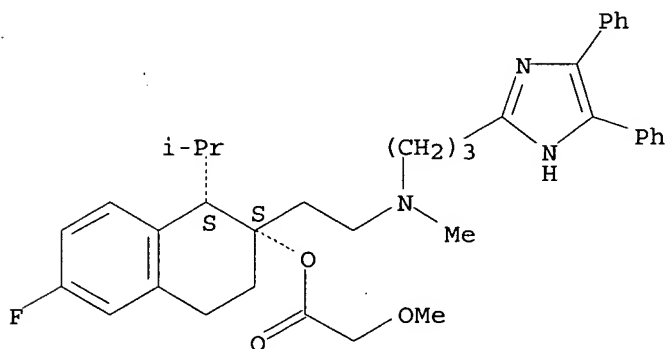


● 2 HCl

RN 116644-23-6 HCAPLUS

CN Acetic acid, methoxy-, 2-[2-[[3-(4,5-diphenyl-1H-imidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester, dihydrochloride, (1S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 2 ' HCl

RN 116644-53-2 HCAPLUS

CN Acetic acid, methoxy-, (1S,2S)-2-[2-[[3-(1H-benzimidazol-2-yl)propyl]methylamino]ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-(1-methylethyl)-2-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.